



TEXAS BOND REVIEW BOARD

2016 ANNUAL REPORT

FISCAL YEAR ENDED AUGUST 31, 2016

Texas Bond Review Board Annual Report 2016

Fiscal Year Ended August 31, 2016

Greg Abbott, Governor
Chairman

Dan Patrick, Lieutenant Governor

Joe Straus, Speaker of the House of Representatives

Glenn Hegar, Comptroller of Public Accounts

Robert C. Kline
Executive Director

December 2016

Overview

Background

The Texas Bond Review Board (BRB) is responsible for the approval of all state debt issues (excluding Permanent University Fund debt, Tax and Revenue Anticipation Notes and self-supporting debt issued by institutions of higher education with an unenhanced rating of AA- or higher) and lease purchase obligations with an initial principal amount of greater than \$250,000 or a term of longer than five years. The BRB is also responsible for the collection, analysis and reporting of information on state debt as well as the debt of local political subdivisions in Texas. In addition, the BRB administers the state's Private Activity Bond Allocation Program. This report discusses the activities undertaken by the Board and related events of the past fiscal year.

As of August 2016 Texas' general obligation (GO) debt was rated at Aaa/AAA/AAA by the three major credit rating agencies, Moody's Investors Service (Moody's), Standard & Poor's (S&P) and Fitch Ratings (Fitch), respectively. All three rating agencies maintain their outlook as "stable." In addition, on July 6, 2016 the Kroll Bond Rating Agency assigned a long-term rating of AAA with a stable outlook to the State of Texas' GO Bonds.

On June 30, 2016, S&P reaffirmed its AA+ long-term debt rating for the United States and maintained its long-term outlook as stable. Similarly, on April 12, 2016, Fitch affirmed its AAA rating for the U.S. with a long-term outlook of stable. In addition, on July 18, 2013, Moody's affirmed the United States government Aaa rating and changed its outlook to stable from negative. Texas' GO borrowing costs have not been impacted by changes in U.S. credit ratings.

Texas ended fiscal 2016 with a total consolidated General Revenue Fund cash balance of \$6.11 billion (*Figure 1.1*), a 45.0 percent decrease from the fiscal 2015 year-end closing balance of \$11.12 billion. Contributing to this decrease were an increase in Health and Human Services expenditures.

According to Moody's 2016 State Debt Medians, Texas ranked 44th among all states in net tax-supported debt per capita. Texas had \$386 in net tax-supported debt per capita compared to the national mean and median of \$1,431 and \$1,025, respectively. Texas' net tax-supported debt per capita ranked second to lowest when compared to that of the eight other states rated AAA.

Total not self-supporting debt (debt receiving annual legislative appropriations from state general revenue for debt-service payments) increased from \$2.75 billion at the end of fiscal 2007 to \$6.71 billion at the end of fiscal 2016, an increase of 143.9 percent, and an increase of 10.9 percent from the \$6.05 billion outstanding in fiscal 2015. This increase is primarily the result of a \$615.0 million issuance of GO highway improvement bonds by the Texas Transportation Commission.

The most recent U.S. Census Bureau data for state and local debt outstanding show that for census years 2012-13, Texas was the nation's 2nd most populous state and ranked 2nd among the ten most populous states in terms of Local Debt Per Capita, 9th in State Debt Per Capita and 5th in Total State and Local Debt Per Capita.

Constitutional Debt Limit

As of August 31, 2016 Texas' constitutional debt limit (CDL) remained below the maximum of 5 percent with 1.36 percent calculated for debt outstanding and 1.01 percent calculated for authorized but unissued debt for a total of 2.37 percent calculated including both outstanding and authorized but unissued debt. Included in the CDL is the \$767.7 million of revenue bonds authorized by the 84th Legislature for the Texas Facilities Commission. The CDL declined 11.8 percent from the 2.65 percent calculated for outstanding and authorized but unissued debt for fiscal 2015. The CDL is expected to continue to decrease with the issuance of authorized debt.

State and Local Financings in FY 2016

State Debt

In fiscal year 2016 the state's total debt outstanding increased 5.7 percent to \$49.75 billion compared to \$47.09 billion in fiscal 2015 and \$44.33 billion in fiscal 2014.

Bonds issued by Texas state agencies, colleges and universities during fiscal year 2016 decreased by 20.8 percent to an aggregate total of \$7.26 billion compared to \$9.17 billion issued in fiscal 2015. Fiscal year 2016 issues included \$4.57 billion in new-money and \$2.69 billion in refunding bonds. Other debt issued included \$1.87 billion of commercial paper.

As of August 31, 2016, a total of \$7.71 billion was authorized for state commercial paper (CP) or variable-rate note (VRN) programs. Of this amount, \$2.55 billion was outstanding as of the end of fiscal 2016, approximately \$33.2 million less than the amount outstanding at fiscal year-end 2015.

Texas state issuers expect to issue approximately \$7.74 billion in bonds, CP and VRN during fiscal 2017, a projected decrease of \$2.61 billion (25.2%) over the amount projected for fiscal 2016. This amount includes \$700.0 million of GO not self-supporting highway improvement bonds expected to be issued by the Texas Transportation Commission.

Local Debt

As of fiscal year-end 2016 Texas local governments had \$218.45 billion in outstanding debt, an increase of \$22.97 billion (11.8 percent) since fiscal 2012. Of that amount 61.9 percent (\$135.19 billion) is GO debt to be repaid from local tax collections, and the remaining 38.1 percent (\$83.26 billion) will be repaid from revenues generated by various projects such as water, sewer and electric utility fees. Since fiscal 2012, tax-supported debt outstanding increased 16 percent (\$18.60 billion) and revenue debt outstanding increased 5.5 percent (\$4.37 billion).

School Districts accounted for 34.3 percent (\$74.91 billion) of all local debt outstanding and Cities accounted for 32.6 percent (\$71.11 billion). Water districts held the third highest percentage and accounted for 15.2 percent (\$33.24 billion) of all local debt outstanding. The remaining 17.9 percent (\$3 billion) was held by Community and Junior Colleges, Counties, Health/Hospital Districts and Other Special Districts.

Texas issuance of local debt has fluctuated over the past decade from a low of \$22.97 billion in fiscal 2010 to a high of \$39.49 in fiscal 2016, a slight increase of 1.8 percent from fiscal 2015.

Over the past five fiscal years, new-money debt issuance totaled \$69.76 billion and refunding debt totaled \$89.30 billion. During that time the top three issuers of new-money volume were school districts, cities and water districts that together comprised 84.9 percent of the new-money volume (\$59.2 billion) and 82.7 percent of the refunding transaction volume (\$73.8 billion).

Issuance Costs

Excluding issuances of conduit and private placement debt, during fiscal 2016 the weighted average of issuance cost for state bond issuers was \$5.20 per \$1,000 compared to \$5.40 per \$1,000 for fiscal 2015. The issuances ranged in size from \$19.2 million to \$911.36 million.

Private Activity Bond Allocation Program and Other Bonding Authority

Texas again experienced an increase in volume cap for the Program Year 2016 Private Activity Bond (PAB) Allocation Program. The 2016 volume cap was set at \$2,746,911,400, an increase of \$51.2 million (1.9 percent) over the calendar 2015 cap. The total size of the PAB program including 2016 volume cap and carryforward, was \$6.56 billion, a 1.5 percent increase from the 2015 total. As of November 15, 2016, \$850.6 million had been allocated and application requests totaled \$3.40 billion, a decrease of 22.2 percent from Program Year 2015.

As of December 1, 2016 Texas had \$209.2 million in unused Qualified Energy Conservation Bond authority.

Debt Authority – 84th Texas Legislature

The 84th Legislature authorized the issuance of \$767.7 million of revenue bonds and appropriated those bond proceeds in the General Appropriations Act to the Texas Facilities Commission for the North Austin and Capitol Complex projects. The bonds are anticipated to be repaid with lease payments from state agencies subject to biennial appropriation by the Legislature. Such lease payments were appropriated to the Texas Facilities Commission for the 2016-2017 biennium. In addition, the 84th Legislature appropriated debt service for the Texas Transportation Commission to issue \$1.35 billion of Prop 12 GO debt and for the Cancer Prevention and Research Institute of Texas (CPRIT) to issue \$600 million in GO debt for the biennium.

The Legislature also authorized \$3.10 billion in Tuition Revenue Bond (TRB) debt with the passing of HB 100. Historically, the legislature has appropriated funds in an amount equal to all or a portion of the debt service on tuition revenue debt issued.

Additionally, the 84th Legislature passed HB 122 which limits the issuance of debt secured by the Texas Mobility Fund solely to refundings or issuances that replace variable-rate debt.

Additional Detail

This report concludes with seven appendices. Appendix A provides a detailed description of each state bond transaction closed in fiscal 2016. Appendix B reports on commercial paper and variable-rate debt programs used by state agencies and universities. Appendix C provides a background discussion of Texas Swap Programs and reports on swaps outstanding and debt-service requirements. While not a debt of the state, the aggregate notional amount of interest rate swaps outstanding at the state level was \$4.51 billion at fiscal year-end 2016. Appendix D provides an overview of the costs of issuance and underwriting spread. Appendix E provides a brief description of each of the state's bond issuing entities. Appendix F provides a brief overview of the Private Activity Bond Program. Appendix G provides a glossary of terms.

For limitations on the purpose and use of this report, see the disclosure preceding Chapter 1.

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Cautionary Statements

Chapter 1231 of the Texas Government Code directs issuers of state securities to report their securities transactions to the Bond Review Board (BRB). Chapter 1231 also requires the BRB to report the data to the governor, lieutenant governor, the speaker of the house, and each member of the legislature in an annual report within 90 days of the end of each state fiscal year. This report is intended to satisfy these Chapter 1231 duties.

The data in this report and on the BRB's website is compiled from information reported to the BRB from various sources and has not been independently verified. The reported debt and defeasance data of state agencies may vary from actual debt outstanding, and the variance for a specific issuer could be substantial.

State debt data compiled does not include all installment purchase obligations, but certain lease-purchase obligations are included. In addition, SECO LoanSTAR Revolving Loan Program and certain other revolving loan program debt and privately-placed loans are not included. Outstanding debt excludes debt for which sufficient funds have been escrowed to retire the debt either from proceeds of refunding debt or from other sources.

Future debt issuance is based on estimates supplied by each issuing agency. Future debt service on variable-rate, commercial paper, and other short-term and demand debt is estimated on the basis of interest rate and refinancing assumptions described in the report. Actual future data could be affected by changes in legislative and oversight direction, agency financing decisions, prevailing interest rates, market conditions, and other factors that cannot be predicted. Consequently, actual future data could differ from the estimates, and the difference could be substantial. The BRB assumes no obligation to update any such estimate of future data.

Historical data and trends presented are not intended to predict future events or continuing trends, and no representation is made that past experience will continue in the future.

This report refers to credit ratings. An explanation of the significance of the ratings may be obtained from the rating agencies furnishing the ratings. Ratings reflect only the respective views of each rating agency. In reporting ratings herein, the BRB does not intend to endorse the ratings or make any recommendation to buy, sell or hold securities.

This report is intended to meet chapter 1231 requirements and inform the state leadership and the Legislature. This report is not intended to inform investors in making a decision to buy, hold, or sell any securities, nor may it be relied upon as such. Data is provided as of the date indicated and may not reflect debt, debt service, population or other data as of any subsequent date. This data may have changed from the date as of which it is provided. For more detailed or more current information, see the issuers' web sites or their filings at Electronic Municipal Market Access (EMMA®). The BRB does not control or make any representation regarding the accuracy, completeness or currency of any such site, and no referenced site is incorporated herein by that reference or otherwise.

Chapter 1

Texas Debt in Perspective

As of September 27, 2013 Texas' general obligation (GO) debt is rated Aaa/AAA/AAA by the three major credit rating agencies, Moody's Investors Service (Moody's), Standard & Poor's (S&P) and Fitch Ratings (Fitch), respectively. All three rating agencies maintain their outlook as "stable". Table 1.2 provides a tier-ranking of each state relative to the states rated AAA by all three major rating agencies. In addition, the Kroll Bond Rating Agency assigned a long-term rating of AAA with a stable outlook to the State of Texas' GO Bonds.

On June 30, 2016, S&P reaffirmed its AA+ long-term debt rating for the United States and maintained its long-term outlook as stable. Similarly, on April 12, 2016, Fitch affirmed its AAA rating for the U.S with a long-term outlook of stable. In addition, on July 18, 2013, Moody's affirmed the United States government Aaa rating and changed its outlook to stable from negative. Texas' GO borrowing costs have not been impacted by changes in U.S. credit ratings.

According to Moody's 2016 State Debt Medians, Texas ranked 44th among all states in net tax-supported debt per capita. Texas had \$386 in net tax-supported debt per capita compared to the national mean and median of \$1,431 and \$1,025, respectively.

STATE DEBT

Texas' Financial Position

Texas ended fiscal 2016 with a total consolidated General Revenue Fund cash balance of \$6.11 billion (*Figure 1.1*), a 45.0 percent decrease from the fiscal 2015 year-end closing balance of \$11.12 billion. Contributing to this decrease were an increase in Health and Human Services expenditures.

Total Tax Collections received decreased by 4.8 percent to \$46.55 billion. Total Net Revenues and Other Sources increased by 3.3 percent to \$141.00 billion, and Total Expenditures and Other Uses increased by 7.1 percent to \$146.02 billion (*Table 1.1*).

The Sales Tax remains the state's primary source of revenue and accounted for 60.6 percent of Total Tax Collections during fiscal 2016. Sales Tax revenues decreased 2.3 percent from the prior fiscal year to \$28.20 billion. The Motor Vehicle Sales/Rental Tax increased 2.3 percent (\$101.4 million), the Motor Fuel Tax increased 2.0 percent (\$67.6 million), the Insurance Tax increased 8.7 percent (\$177.3 million), and the Alcoholic Beverages Tax increased 3.8 percent (\$43.8 million), but the state's Oil Production Tax

Figure 1.1
ENDING CASH BALANCE IN TEXAS' CONSOLIDATED GENERAL REVENUE FUND
(amounts in millions)



Source: Texas Comptroller of Public Accounts, 2016 Annual Cash Report.

Table 1.1
STATEMENT OF CASH CONDITION
CONSOLIDATED GENERAL REVENUE FUND
(amounts in thousands)

	Fiscal 2015	Fiscal 2016	% Change
Revenues and Beginning Balance			
Beginning Balance, September 1	\$ 10,978,625	\$ 11,129,456	1.4%
Tax Collections			
General Revenue Fund			
Sales Tax	28,866,357	28,201,301	-2.3%
Motor Vehicle Sales / Rental Taxes	4,491,960	4,593,369	2.3%
Motor Fuel Taxes	3,446,157	3,513,716	2.0%
Franchise Tax	2,874,391	2,845,291	-1.0%
Insurance Taxes	2,049,417	2,226,725	8.7%
Natural Gas Production Tax	1,280,410	578,799	-54.8%
Cigarette and Tobacco Taxes	608,361	561,916	-7.6%
Alcoholic Beverages Taxes	1,138,776	1,182,549	3.8%
Oil Production and Regulation Taxes	2,879,055	1,704,282	-40.8%
Inheritance Tax	-3,817	0	N/A
Utility Taxes	480,766	434,965	-9.5%
Hotel Occupancy Tax	525,819	521,152	-0.9%
Other Taxes	272,734	182,616	-33.0%
Total Tax Collections	\$ 48,910,386	\$ 46,546,681	-4.8%
Federal Income	33,485,450	35,445,563	5.9%
Licenses, Fees, Permits, Fines, & Penalties	7,640,263	9,492,112	24.2%
Interest and Investment Income	86,454	69,896	-19.2%
Net Lottery Proceeds	1,893,534	2,219,965	17.2%
Sales of Goods and Services	192,450	179,866	-6.5%
Settlements of Claims	523,923	597,126	14.0%
Land Income	43,445	18,187	-58.1%
Contributions to Employee Benefits	55	55	0.0%
Other Revenue Sources	5,130,881	5,415,240	5.5%
Interfund Transfers/Investment Transactions	38,618,395	41,016,695	6.2%
Total Net Revenue and Other Sources	\$ 136,525,236	\$ 141,001,386	3.3%
Expenditures and Ending Balance			
General Government	2,792,569	2,951,242	5.7%
Education	32,614,156	33,755,752	3.5%
Employee Benefits	3,558,029	4,111,416	15.6%
Health and Human Services	46,205,690	50,597,763	9.5%
Public Safety and Corrections	4,129,027	4,772,233	15.6%
Lottery Winnings Paid	554,014	672,822	21.4%
Other Expenditures*	2,892,352	3,113,380	7.6%
Interfund Transfers / Investment Transactions	43,629,250	46,044,098	5.5%
Total Expenditures and Other Uses	\$ 136,375,087	\$ 146,018,706	7.1%
Net Increase to Petty Cash Accounts	682	-14	-102.1%
Ending Balance, August 31	\$ 11,119,456	\$ 6,112,123	-45.0%

Source: Texas Comptroller of Public Accounts, 2016 Cash Report, Tables 1 & 11.

* Includes Transportation, Natural Resources/Recreational Services, Regulatory Agencies, Payment of Interest and Capital Outlays.

Totals may not sum due to rounding.

and Natural Gas Production Tax decreased by 40.8 percent (\$1.17 billion) and 54.8 percent (\$701.6 million), respectively.

Debt Authority – 84th Texas Legislature

The 84th Legislature authorized the issuance of \$767.7 million of revenue bonds and appropriated those bond proceeds in the General Appropriations Act to the Texas Facilities Commission for the North Austin and Capitol Complex projects. The bonds are anticipated to be repaid with lease payments from state agencies subject to biennial appropriation by the Legislature. Such lease payments were appropriated to the Texas Facilities Commission for the 2016-2017 biennium. In addition, the 84th Legislature appropriated debt service for the Texas Transportation Commission to issue \$1.35 billion of Prop 12 GO debt and for the Cancer Prevention and Research Institute of Texas (CPRIT) to issue \$600 million in GO debt for the biennium.

The Legislature also authorized \$3.10 billion in (TRB) debt with the passing of HB 100. Historically, the legislature has appropriated funds in an amount equal to all or a portion of the debt service on TRB debt issued.

Additionally, the 84th Legislature passed HB 122 which limits the issuance of debt secured by the Texas Mobility Fund solely to refundings or issuances that replace variable-rate debt.

83rd Legislature – Regular Session, 1st, 2nd and 3rd Called Special Session

The 83rd Legislature appropriated debt service for the 2014-15 biennium for the Texas Transportation Commission to issue \$2 billion of Prop 12 GO debt, for the Cancer Prevention and Research Institute of Texas (CPRIT) to issue \$600 million in GO debt and for Texas Public Finance Authority (TPFA) to issue \$146.2 million in GO debt for various state agencies.

Senate Joint Resolution (SJR) 1 of the Regular Session proposed the creation of a State Water Implementation Fund that would be administered, without further appropriation, by the Texas Water Development Board (TWDB). HB 1025 authorized the transfer of \$2 billion from the state's Economic Stabilization Fund (ESF), also known as the Rainy Day Fund, to implement the state's water plan. Voters approved the proposed amendments to the Texas Constitution at the November 5, 2013 bond election.

SJR 1 of the 3rd Called Special Session proposed a constitutional amendment diverting half of the oil and gas tax revenues to be deposited into the ESF to the State Highway Fund to provide transportation funding for repairs and maintenance of public roads. Voters approved the proposed amendment to the Texas Constitution at the November 4, 2014 general election.

82nd Legislature – Regular Session and 1st Called Special Session

The 82nd Legislature appropriated debt service for the 2012-13 biennium for the Texas Transportation Commission (TTC) to issue \$4 billion of Prop 12 GO debt, for the Cancer Prevention and Research Institute of Texas (CPRIT) to issue \$600 million in GO debt and for the Texas Public Finance Authority (TPFA) to issue \$182.4 million in GO debt for various state agencies.

In November 2011 voters approved Proposition 2 that allows the Texas Water Development Board (TWDB) to issue debt for its Development Fund II in an amount not to exceed \$6 billion outstanding at any time. In addition, voters approved Proposition 3 that allows the Texas Higher Education Coordinating Board (THECB) to issue GO bonds to finance educational loans to students with a maximum amount outstanding not to exceed the aggregate amount of previously authorized constitutional authority of \$1.86 billion, and

increases the maximum amount of bonds issued per fiscal year from \$125 million to \$350 million. These programs are currently self-supporting and have never required a draw on state general revenues unless it was specifically appropriated for certain TWDB programs.

The 82nd Legislature 1st Called Special Session enacted Senate Bill (SB) 5 that exempts from BRB approval issuances by higher education institutions that have an unenhanced bond rating of AA- or higher and do not pledge the general revenue of the state. As of August 31, 2013 issuances for two higher education institutions, Texas Southern University and Texas State Technical College System required BRB approval.

81st Legislature - Regular Session and 1st Called Special Session

The 81st Legislature appropriated debt service for the 2010-11 biennium to CPRIT to issue \$450 million in GO debt under the \$3 billion in authority approved by voters in 2007.

House Bill (HB) 4409 authorized the issuance of three different classes of public securities totaling \$2.5 billion to fund excess losses incurred by the Texas Windstorm Insurance Agency. SB 2064 modified the Private Activity Bond (PAB) Program and increased the responsibilities of the BRB (*See Chapter 4 for a discussion of changes to the PAB Program.*)

HB 1 of the 1st Called Special Session of the 81st Legislature appropriated to TTC for the 2010-11 biennium \$2 billion of the \$5 billion in GO bonds approved by voters in 2007 to fund highway improvement projects. No bonds were issued under this appropriation during fiscal 2010, but in September 2010, TTC issued \$977.8 million in GO bonds of which \$815.4 million was issued as Build America Bonds.

Additional Bonding Authority

In October 2008 the Heartland Disaster Tax Relief Act of 2008 created \$1.86 billion in tax-exempt bonding authority for the Hurricane Ike disaster area which includes 34 counties along the Texas coast. The Hurricane Ike Authority expired on January 1, 2013.

In February 2009 the American Recovery and Reinvestment Act of 2009 (ARRA) created new types of bonding authority and expanded authority under existing programs. All of these programs have expired except for the Qualified Energy Conservation Bond Program which has no expiration date. (*See Chapter 4 for more detail related to additional bonding authority.*)

Recent Credit Rating Agency Reports on Texas' General Obligation Debt

S&P's latest action on Texas' GO rating was to affirm its AAA rating and stable outlook on June 1, 2016. In its report of that date entitled "Texas Water Development Board's 2016B, 2016C and 2016D Bonds rated AAA" S&P stated that "The AAA GO rating reflects our view of the state's: Diverse economy as evidenced by Texas' relatively low unemployment, despite the recent weakness in the oil and energy sectors. We expect the state's economy to perform more strongly than that of the nation as a whole; Strong revenue forecasting and cash management practices, including comprehensive monthly revenue and expenditure cash monitoring and forecasts, as well as a willingness to maintain strong liquidity to meet constitutionally defined priorities, including the repayment of debt services; Low overall net debt; Rising level of unfunded pension liabilities, which have largely been the result of contributions below the actuarially determined annual required contribution. Should this trend continue, it could put downward pressure on the rating; and Potential long-term budgetary pressures, primarily related to the growing proportion of public school expenses that Texas is required to fund and its currently

Table 1.2 STATE BOND RATINGS as of September 2016				
States With a General Obligation Rating				
<u>Steps from AAA Ranking</u>	<u>State</u>	<u>Moody's Investors Service</u>	<u>Standard & Poor's</u>	<u>Fitch Ratings</u>
-	Delaware	Aaa	AAA	AAA
-	Georgia	Aaa	AAA	AAA
-	Maryland	Aaa	AAA	AAA
-	Missouri	Aaa	AAA	AAA
-	North Carolina	Aaa	AAA	AAA
-	Tennessee	Aaa	AAA	AAA
-	TEXAS	Aaa	AAA	AAA
-	Utah	Aaa	AAA	AAA
-	Virginia	Aaa	AAA	AAA
1	Florida	Aa1	AAA	AAA
1	New Mexico	Aaa	AA+	**
1	South Carolina	Aaa	AA+	AAA
1	Vermont	Aaa	AA+	AAA
3	Arkansas	Aa1	AA	**
3	Massachusetts	Aa1	AA+	AA+
3	Minnesota	Aa1	AA+	AA+
3	Ohio	Aa1	AA+	AA+
3	Oregon	Aa1	AA+	AA+
3	New York	Aa1	AA+	AA+
3	Washington	Aa1	AA+	AA+
4	Alabama	Aa1	AA	AA+
4	Alaska	Aa2	AA+	AA+
4	Hawaii	Aa1	AA+	AA
4	Montana	Aa1	AA	AA+
4	New Hampshire	Aa1	AA	AA+
4	Oklahoma	Aa2	AA+	AA+
4	Mississippi	Aa2	AA	AAA
5	Nevada	Aa2	AA	AA+
6	Maine	Aa2	AA	AA
6	Michigan	Aa1	AA-	AA
6	Rhode Island	Aa2	AA	AA
6	Wisconsin	Aa2	AA	AA
6	West Virginia	Aa1	AA-	AA
8	Louisiana	Aa3	AA	AA-
9	California	Aa3	AA-	AA-
9	Connecticut	Aa3	AA-	AA-
9	Pennsylvania	Aa3	AA-	AA-
15	New Jersey	A2	A	A
22	Illinois	Baa2	BBB+	BBB+
States With Only An Issuer Credit Rating				
*	Arizona	Aa2	AA	**
*	Colorado	Aa1	AA	**
*	Idaho	Aa1	AA+	AA+ (Implied GO)
*	Indiana	Aaa	AAA	AA+ (Lease)
*	Iowa	Aaa	AAA	AAA (Implied GO)
*	Kansas	Aa2	AA-	**
*	Kentucky	Aa2	A+	AA- (Implied GO)
*	Nebraska	Aa2	AAA	**
*	North Dakota	Aa1	AA+	**
*	South Dakota	Aaa	AAA	AA+ (Implied GO)
*	Wyoming	**	AAA	**
<p>* Issuer Credit Rating. ** Not rated Source: Moody's Investors Service, Standard & Poor's, and Fitch Ratings. The Bond Buyer - Ratings for U.S. States, September 27, 2016.</p>				

insufficient new sources of recurring dedicated tax revenue to support the increased education funding.”

On October 14, 2016, Moody’s affirmed its Aaa rating and stable outlook on Texas’ GO debt. In its report of that date entitled “Rating Action: Moody’s Assigns Aaa to \$25.5M GO Refunding Bonds, Series 2016; outlook stable”, Moody’s stated that “The Aaa rating reflects the strong fundamentals of the Texas economy; a rainy day fund that provides a healthy budgetary cushion; and low bonded debt levels. Those strengths are offset by low oil prices that are slowing the state’s economy, above-average pension liabilities and ongoing structural pressure to balance the state’s finances as it seeks to maintain education and property tax relief spending amid high population growth in a lower revenue growth environment.”

On April 28, 2016, Fitch affirmed its AAA rating and stable outlook on Texas’ GO debt. In its report of that date entitled “Fitch Rates Texas Public Finance Auth’s \$187M GO Bonds AAA; Outlook Stable”, Fitch stated that “Texas’ long-term AAA Issuer Default Rating reflects an economy that continues to grow despite the severe contraction in the state’s globally important energy sector, its conservative financial operations and manageable liability burden. The oil price plunge that began in late 2014 interrupted a long period of economic and revenue growth, but diversification over time leaves the state better positioned relative to past cycles to weather the energy sector downturn.”

On July 6, 2016, the Kroll Bond Rating Agency assigned a long-term rating of AAA with a stable outlook to the State of Texas’ GO Bonds. Key rating strengths include: a very large and diversified state economic base, conservative financial management and budgeting policies and procedures, a high level of financial reserves and strong liquidity position and low debt burden. Key rating

concerns include: the volatility in oil and gas prices still impact economic activity and revenue collections, a potential negative impact of current franchise tax litigation, and increasing budget pressure due to recent constitutional amendment diverting sales tax revenues to transportation purposes.

Factors Affecting the Rating of Texas’ General Obligation Debt

Credit rating agencies consider four primary factors when rating a state’s debt: economy, finances, debt and management. Within economic factors, the agencies review the state’s income, employment, economic diversity and demographics. Financial factors considered are the state’s revenues, cost structure, balance sheet health and liquidity. Debt factors reviewed include debt ratios and debt security and structure. Management factors include: budget development and management practices; constitutional constraints, initiatives and referenda; executive branch controls; mandates to maintain a balanced budget; rainy day funds; and political polarization.

The sometimes overlapping conclusions reached by all three rating agencies reflect their collective judgment that several challenges may arise if Texas is faced with a low-revenue environment. Among the most prominent and commonly cited of these problems are: (1) the state’s heavy dependence on the sales tax without support from a state income tax; (2) issues related to unfunded pension liabilities, funding for public schools, and assistance programs such as Medicaid; and (3) the state’s continued rapid population growth that will necessitate budget increases for operating costs as well as increases in capital expenditures for growing infrastructure needs including transportation and water development.

Table 1.2 provides a tier ranking of each state’s rating relative to states that are rated Triple-A by all three rating agencies. Texas is one of

Table 1.3
CHANGES IN STATE BOND RATINGS
September 2015 to September 2016

State	Moody's	Standard & Poor's	Fitch
Upgrades			
California	-	-	A+ to AA-
Hawaii	Aa2 to Aa1	AA to AA+	-
Mississippi	-	-	AA+ to AAA
South Dakota*	Aa2 to Aaa	-	-
Tennessee	-	AA+ to AAA	-
Downgrades			
Alaska	Aaa to Aa2	AAA to AA+	AAA to AA+
Connecticut		AA to AA-	AA to AA-
Illinois	Baa1 to Baa2	A- to BBB+	-
Kansas*		AA to AA-	
Kentucky*	-	AA- to A+	-
Louisiana	Aa2 to Aa3	-	AA to AA-
North Dakota*	-	AAA to AA+	-
West Virginia		AA to AA-	AA+ to AA
* Issuer Credit Rating. Ratings. The Bond Buyer - Ratings for U.S. States, September 27, 2016.			

nine states that is rated Triple-A by Moody's, S&P and Fitch.

Changes in State Bond Ratings

During the past year, five states received upgrades in ratings. S&P upgraded Hawaii and Tennessee one notch to AA+ and AAA, respectively. Moody's upgraded Hawaii one notch to Aa1 and South Dakota two notches to Aaa. Fitch upgraded California one notch to AA- and Mississippi one notch to AAA.

Eight states received ratings downgrades: Alaska was downgraded by all three rating agencies. Connecticut and West Virginia were both downgraded by S&P and Fitch. Kansas, Kentucky and North Dakota were all three downgraded by S&P. Illinois was downgraded by Moody's and S&P while Louisiana was downgraded by Moody's and Fitch (*Table 1.3*).

Texas' Debt Ratios Compared to AAA-Rated and Other States

According to Moody's 2016 State Debt Medians, Texas ranked 44th among all states in

net tax-supported debt per capita. Texas had \$383 in net tax-supported debt per capita compared to the national mean and median of \$1,431 and \$1,025, respectively (*Table 1.4*). Texas' net tax-supported debt per capita ranked second to lowest when compared to that of the eight other states rated AAA (*Table 1.5*). By comparison, AAA-rated Delaware had the highest debt per capita at \$2,385. Additionally, Texas' 2015 personal income per capita of \$46,947 is above that of five other AAA states: Georgia, Missouri, North Carolina, Tennessee and Utah.

Texas' net tax-supported debt as a percent of calendar 2014 personal income was 0.9 percent, 44th among all the states and below the national median and mean of 3.0 percent and 2.5 percent, respectively (*Table 1.4*). Compared to the eight other states also rated AAA by all three major rating agencies, Texas ranked second to lowest on this measure with the mean and median for all AAA-rated states at 2.4 percent and 2.5 percent, respectively (*Table 1.5*).

The most recent U.S. Census Bureau data for state and local debt outstanding show that for census years 2012-13, Texas was the nation's 2nd most populous state and ranked 2nd among the ten most populous states in terms of Local Debt Per Capita, 9th in State Debt Per Capita and 5th in Total State and Local Debt Per Capita (*Table 1.6*) with 85.0 percent of the state's total debt burden at the local level. Listed by decreasing amount outstanding, local debt is issued by public school districts; cities, towns and villages; water districts; special districts; counties; community and junior colleges and health/hospital districts.

Texas state and local debt outstanding as a percentage of gross state product has remained relatively constant indicating that economic growth has kept pace with state and local debt outstanding (*Figure 1.2*).

Table 1.4 SELECTED TAX-SUPPORTED DEBT MEASURES BY STATE					
<u>State</u>	<u>Moody's Rating</u>	<u>Net Tax-Supported Debt as a % of 2014</u>		<u>Net Tax-Supported</u>	
		<u>Personal Income</u>	<u>Rank</u>	<u>Debt Per Capita</u>	<u>Rank</u>
Hawaii	Aa2	9.9%	1	\$4,557	3
Connecticut	Aa3	9.8%	2	6,155	1
Massachusetts	Aa1	9.5%	3	5,592	2
New Jersey	A2	7.3%	4	4,141	4
Washington	Aa1	5.7%	5	2,761	6
New York	Aa1	5.4%	6	3,021	5
Delaware	Aaa	5.2%	7	2,385	8
Illinois	Baa1	5.2%	8	2,522	7
Kentucky	Aa2*	5.2%	9	1,954	10
Mississippi	Aa2	5.0%	10	1,707	15
California	Aa3	4.7%	11	2,323	9
Oregon	Aa1	4.6%	12	1,907	12
Wisconsin	Aa2	4.0%	13	1,780	14
Louisiana	Aa3	3.8%	14	1,609	16
Rhode Island	Aa2	3.7%	15	1,813	13
Maryland	Aaa	3.5%	16	1,928	11
Kansas	Aa2*	3.4%	17	1,534	17
New Mexico	Aaa	3.3%	18	1,230	21
Minnesota	Aa1	3.2%	19	1,527	18
Virginia	Aaa	2.9%	20	1,418	20
West Virginia	Aa1	2.8%	21	1,020	26
Alaska	Aa1	2.7%	22	1,422	19
Georgia	Aaa	2.7%	23	1,029	25
Ohio	Aa1	2.6%	24	1,091	23
Utah	Aaa	2.5%	25	921	29
Florida	Aa1	2.5%	26	1,038	24
Pennsylvania	Aa3	2.5%	27	1,172	22
Alabama	Aa1	2.3%	28	849	30
Maine	Aa2	2.2%	29	928	28
Vermont	Aaa	2.1%	30	1,002	27
Arizona	Aa2*	2.1%	31	776	32
North Carolina	Aaa	1.8%	32	721	33
Michigan	Aa1	1.8%	33	719	34
Arkansas	Aa1	1.7%	34	628	36
South Carolina	Aaa	1.7%	35	603	37
New Hampshire	Aa1	1.5%	36	808	31
Nevada	Aa2	1.5%	37	591	38
South Dakota	NGO**	1.4%	38	652	35
Missouri	Aaa	1.4%	39	574	39
Idaho	Aa1*	1.2%	40	455	41
Indiana	Aaa*	1.2%	41	463	40
Oklahoma	Aa2	0.9%	42	397	43
Colorado	Aa1*	0.9%	43	424	42
Texas	Aaa	0.9%	44	383	44
Tennessee	Aaa	0.7%	45	298	45
Montana	Aa1	0.6%	46	247	46
Iowa	Aaa*	0.5%	47	239	47
North Dakota	Aa1*	0.3%	48	166	48
Wyoming	NGO**	0.1%	49	45	49
Nebraska	NGO**	0.0%	50	8	50
Mean		3.0%		\$1,431	
Median		2.5%		\$1,025	
* Issuer Rating (No G.O. Debt) ** No general obligation debt *** Included for comparison purposes only. Not included in any totals, averages or median calculations. Analysis based on calendar year 2015 data. Puerto Rico excluded due to lack of available data for 2015. Source: Moody's Investors Service, 2016 <i>State Debt Medians</i> .					

Table 1.5						
SELECTED DEBT MEASURES FOR TEXAS AND STATES RATED AAA						
State	Rating*	Net Tax-Supported Debt as a % of 2014		Net Tax-Supported Debt Per Capita		2015 Personal Income Per Capita
		Personal Income	Rank	Debt Per Capita	Rank	Per Capita
Delaware	AAA	5.2%	7	2,385	8	47,633
Georgia	AAA	2.7%	23	1,029	25	40,306
Maryland	AAA	3.5%	16	1,928	11	55,972
Missouri	AAA	1.4%	39	574	39	42,300
North Carolina	AAA	1.8%	32	721	33	40,759
Tennessee	AAA	0.7%	45	298	45	42,094
TEXAS	AAA	0.9%	44	383	44	46,947
Utah	AAA	2.5%	25	921	29	39,308
Virginia	AAA	2.9%	20	1,418	20	52,052
Mean of AAA States		2.4%		\$1,073		\$45,263
Median of AAA States		2.5%		\$921		\$42,300
* Rated Aaa by Moody's, and AAA by Standard & Poor's and Fitch Ratings.						
Analysis based on calendar year 2015 data.						
Sources: Moody's Investors Service, 2016 <i>State Debt Medians</i> ; Bureau of Economic Analysis, State BEAR Facts						

Many communities throughout Texas are continuing to experience significant population growth with increasing demand for infrastructure, programs and services. Net migration into the state, according to the U.S. Census Bureau, increased 7.1 percent (1.8 million) over the past five years forcing many small and medium-sized communities to increase financing for infrastructure such as roads, schools, water and wastewater services to meet expanded needs. Based on projections of current demographic trends, Texas will continue to experience increasing demand for

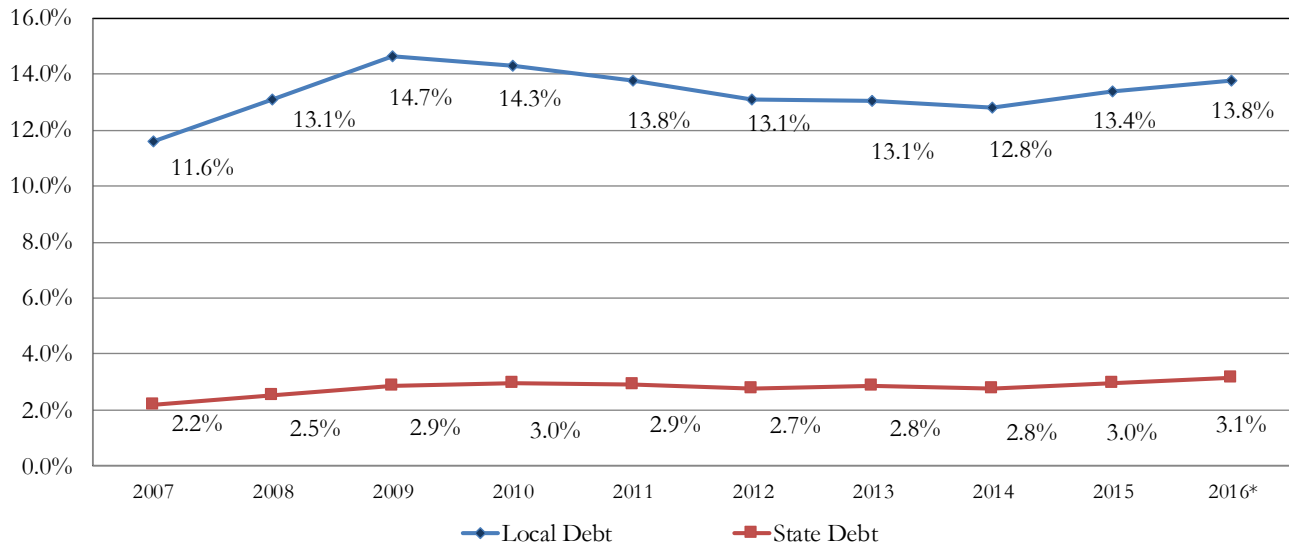
expenditures in these areas.

General Obligation Debt Has Increased Over the Past Decade

General obligation (GO) debt pledges “the full faith and credit of the state” to back the payment of the debt. In the event that program or project revenue is insufficient to pay debt service on self-supporting debt, the first monies coming into the state treasury not otherwise constitutionally appropriated shall be used to pay the debt service.

Table 1.6												
TOTAL STATE AND LOCAL DEBT OUTSTANDING: TEN MOST POPULOUS STATES												
	Total State and Local Debt				State Debt				Local Debt			
State	Population (thousands)	Amount (millions)	Per Capita Amount	Capita Rank	Amount (millions)	% of Total Debt	Per Capita Amount	Capita Rank	Amount (millions)	% of Total Debt	Per Capita Amount	Capita Rank
New York	19,746	\$346,238	\$17,535	1	\$136,014	39.3%	\$6,888	1	\$210,224	60.7%	\$10,646	1
Illinois	12,881	148,689	11,543	2	63,660	42.8%	4,942	2	85,028	57.2%	6,601	4
California	38,803	420,284	10,831	3	152,186	36.2%	3,922	3	268,098	63.8%	6,909	3
Texas	26,957	264,723	9,820	5	39,625	15.0%	1,470	9	225,098	85.0%	8,350	2
Pennsylvania	12,787	130,238	10,185	4	47,021	36.1%	3,677	4	83,217	63.9%	6,508	5
Michigan	9,910	76,315	7,701	6	30,377	39.8%	3,065	5	45,938	60.2%	4,636	7
Florida	19,893	146,427	7,361	7	37,892	25.9%	1,905	8	108,535	74.1%	5,456	6
Ohio	11,594	82,483	7,114	8	33,133	40.2%	2,858	6	49,350	59.8%	4,257	8
Georgia	10,097	55,679	5,514	9	13,293	23.9%	1,317	10	42,386	76.1%	4,198	9
North Carolina	9,944	51,524	5,181	10	19,055	37.0%	1,916	7	32,469	63.0%	3,265	10
MEAN		\$172,260	\$9,279		\$57,226	33.6%	\$3,196		\$115,034	66.4%	\$6,083	
Note: Detail may not add to total due to rounding.												
Source: U.S. Census Bureau, <i>State and Local Government Finances by Level of Government and by State: 2012-2013</i> , the most recent data available.												

Figure 1.2
STATE AND LOCAL DEBT AS A PERCENT OF GROSS STATE PRODUCT



*Uses gross state product as reported for 2015 - Most recent data available.

Source: Texas Bond Review Board - Bond Finance Office; U.S Department of Commerce Bureau of Economic Analysis

Some GO debt, such as that issued by the Texas Veterans' Land Board is self-supporting, and other GO debt, such as that issued by the Texas Public Finance Authority to finance programs for the Cancer Prevention and Research Institution of Texas, Texas Department of Criminal Justice, the Texas Department of Aging and Disability Services and the Texas Youth Commission, is not self-supporting and must receive annual appropriations from the legislature for debt-service payments from the state's general revenue fund.

Total not self-supporting debt increased from \$2.75 billion at the end of fiscal 2007 to \$6.71 billion at the end of fiscal 2016, an increase of 143.9 percent, and an increase of 10.9 percent from the \$6.05 billion outstanding in fiscal 2015. The increase during fiscal 2016 was primarily due to the issuance of highway improvement bonds by TTC (\$615.0 million). Estimated scheduled annual debt service as a percent of unrestricted general revenue remained unchanged in fiscal 2016 at 1.33 percent (*Figure 1.3*).

Unrestricted general revenue increased 3.0 percent in fiscal 2016 to \$50.62 billion from

\$49.38 billion in fiscal 2015 (*Figure 1.4*). Unrestricted general revenue is generally the most available funding source to make debt-service payments and to fund appropriations for state operations.

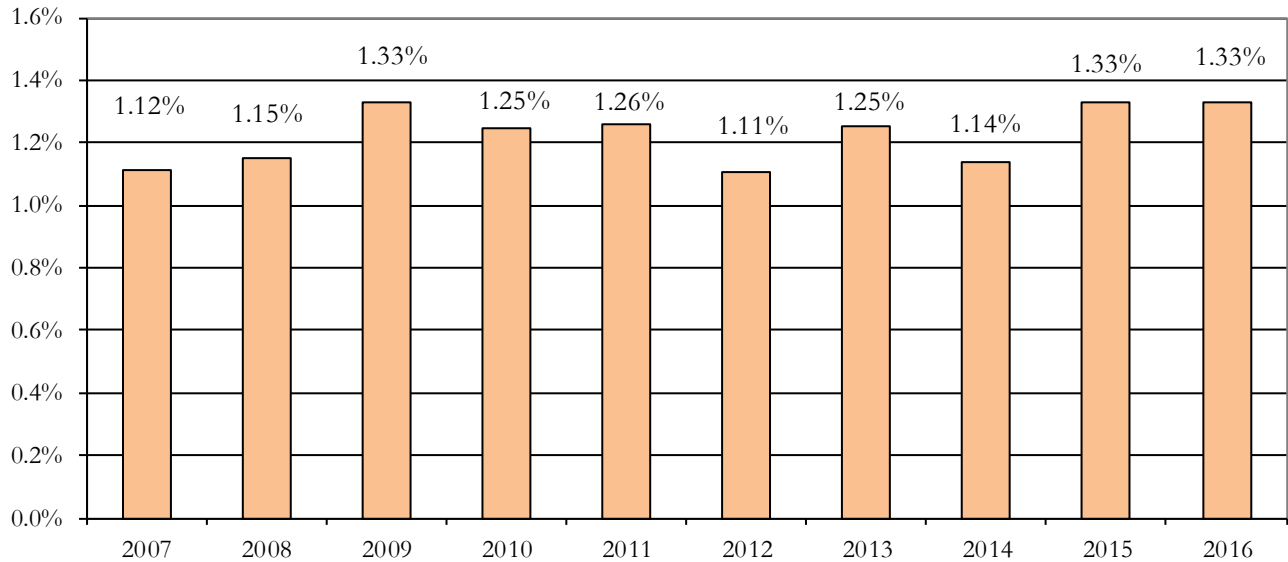
Authorized but Unissued Debt Decreases

Authorized but unissued debt (debt that has been authorized by the legislature and may be issued at any time without further legislative action) decreased by 9.7 percent from approximately \$17.64 billion at the end of fiscal 2015 to approximately \$15.92 billion at the end of fiscal 2016. This decrease is mainly attributable to GO issuances by TTC (\$615.0 million), VLB (\$250.0 million), TPFA (\$369.8 million) and THECB (\$150.0 million). Of the \$15.92 billion of authorized but unissued debt remaining as of fiscal year-end 2016, approximately \$12.10 billion is GO debt while \$3.82 billion is non-GO debt. Approximately \$3.95 billion of the authorized but unissued amount includes GO and non-GO debt payable from general revenue.

Texas' Constitutional Debt Limit and Debt-Management Policy

In 1997 the 75th Legislature passed and voters approved HJR 59 that added Section 49-j to

Figure 1.3
ANNUAL NOT SELF-SUPPORTING SCHEDULED DEBT SERVICE AS A PERCENTAGE OF
UNRESTRICTED GENERAL REVENUE

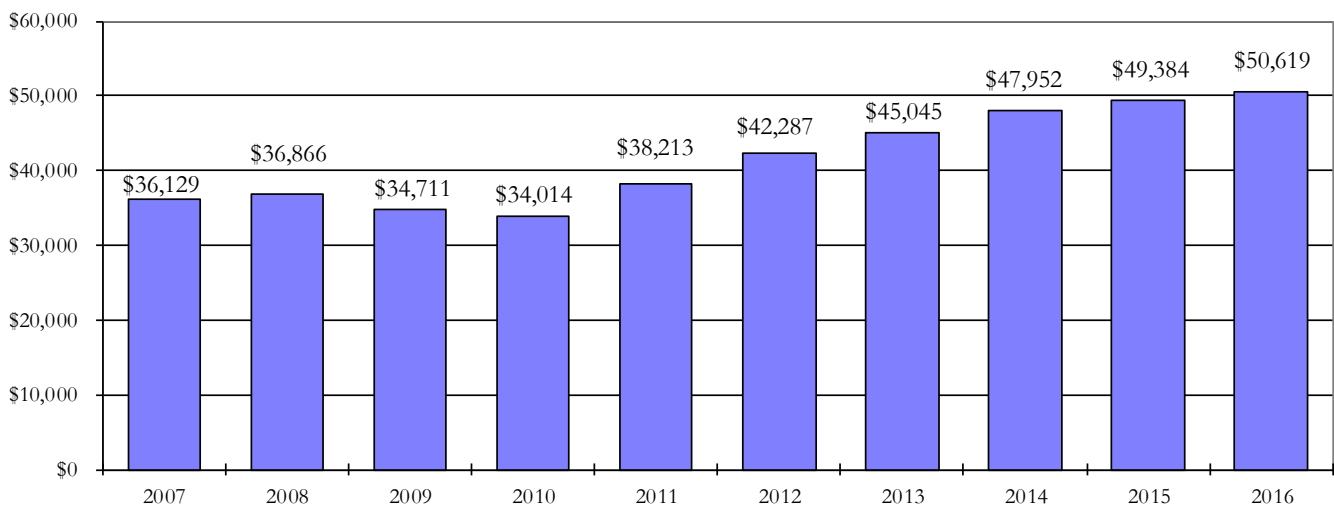


Sources: Texas Bond Review Board - Bond Finance Office and the Texas Comptroller of Public Accounts.

Article III of the Texas Constitution. This amendment states that additional tax-supported debt may not be authorized if the maximum annual debt service on debt payable from general revenue, including authorized but unissued debt, exceeds 5 percent of the average annual unrestricted General Revenue Fund revenues for the previous three fiscal years.

As of August 31, 2016 Texas' constitutional debt limit (CDL) remained below the maximum of 5 percent with 1.36 percent calculated for debt outstanding and 1.01 percent calculated for authorized but unissued debt for a total of 2.37 percent calculated including both outstanding and authorized but unissued debt. Included in the CDL is the

Figure 1.4
UNRESTRICTED GENERAL REVENUE
(millions of dollars)



Source: Texas Comptroller of Public Accounts

\$767.7 million of revenue bonds authorized by the 84th Legislature for the Texas Facilities Commission. The CDL declined 11.8 percent from the 2.65 percent calculated for outstanding and authorized but unissued debt calculated for fiscal 2015.

The decrease in CDL was mainly due to an increase in the three year rolling average of unrestricted general revenue available to pay debt service and a decline in the debt service on authorized but unissued debt payable from general revenue. This decline in authorized but unissued debt service is due to the issuance of \$615 million by TTC during FY 2016 for highway improvement projects and \$369.8 million by TPFA for cancer research projects, both of which were authorized by voters at the November 2007 General Election. The CDL is expected to continue to decrease with the issuance of authorized debt.

HB 2190 passed in the 77th Legislature directed the BRB to adopt formal debt policies and issuer guidelines to provide guidance to issuers of state securities and to ensure that state debt is prudently managed. These policies and guidelines are posted on the agency's website.

SB 1332 passed in the 80th Legislature amended the agency's statutes to require the BRB to adopt a state policy related to the risks and effects of derivative agreements. This policy was adopted in fiscal 2009 and is available on the agency's website.

Capital Planning Review and Approval Process

The 76th Legislature (1999) passed legislation that biennially directs the BRB to produce the state's Capital Expenditure Plan (CEP). The legislation specifies that all state agencies and higher education institutions appropriated funds by the General Appropriations Act (GAA) are required to report capital planning information for projects that fall within four specific project areas: (1) acquisition of land

and other real property; (2) construction of buildings and facilities; (3) renovations of buildings and other facilities estimated to exceed \$1 million for a single state agency or institution of higher education; and (4) major information resources projects estimated to exceed \$1 million. In previous reports, the BRB requested that all planned expenditures exceeding \$250,000 must be reported, but the threshold was adjusted to \$1 million in 2006 for future reports.

From a budgetary and capital planning standpoint, a number of state agencies work together to coordinate the budgetary and capital reporting and approval process for state agencies. They include the Governor's Office of Budget, Planning & Policy (GOBPP), the Legislative Budget Board (LBB), the Texas Higher Education Coordinating Board, the Texas Facilities Commission, the Comptroller of Public Accounts, House Committee on Appropriations (HAC) and Senate Finance Committee (SFC).

The legislature defines the types of projects and cost thresholds to be reported in the CEP. The BRB coordinates the submission of capital projects through the CEP, develops the report and determines the effect of the additional capital requests on the state's budget and debt capacity. The completed plan is then provided to the GOBPP and the LBB to develop recommendations for appropriations to the legislature.

The GOBPP and LBB also assess short-term and long-term budget needs. Through the House Appropriations Committee and Senate Finance Committee, the legislature makes the final decisions on projects to be funded for the two-year biennial period. Approved capital and operating budgets are integrated into the GAA that authorizes specific debt issuance for capital projects. Through the capital budgeting process, capital projects are approved for the two-year biennial period.

Additionally, the CEP reports on the preceding year and the remaining two out years for identifying long-term needs of the state and for future planning purposes.

The 2018-19 CEP was released September 1, 2016, pursuant to House Bill 1, Article IX, Section 11.03 of the 84rd Legislature and covers the out years 2020-21. This report represents the ninth published CEP for the state. The CEP is a management tool for state decision makers to use in assessing future individual capital expenditure requests within the framework of the state's overall financial position. The 2018-19 CEP is available on the agency's website.

Debt Affordability Study

The state's Debt Affordability Study (DAS) is designed to provide the state leadership with an integrated approach to manage state debt by assessing historical debt use and analyzing the state's financial and economic resources in conjunction with long-term needs contained in the CEP. The BRB, LBB and the Texas Public Finance Authority prepared the state's first DAS, released in February 2007. With the passage of SB 1332 (80th Legislature), the BRB in conjunction with the LBB is responsible for

subsequent editions of the DAS. Historical DAS reports are available on the agency's website. The 2017 DAS will be released in February 2017.

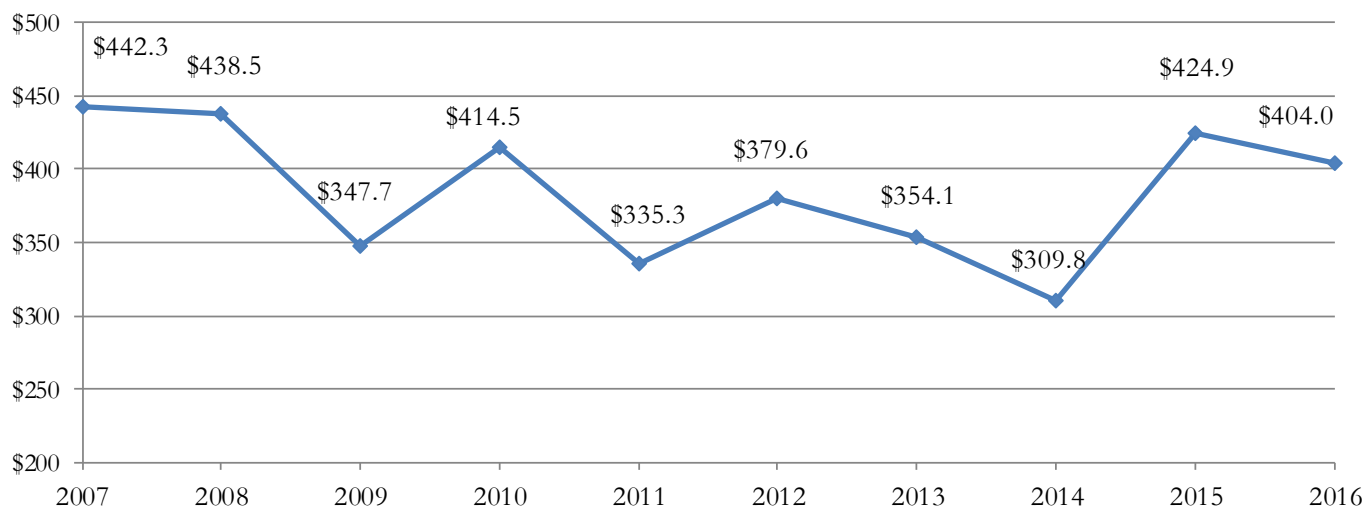
LOCAL DEBT

Local Debt Issuance Process

Local governments in Texas issue debt to finance construction and renovation of government facilities (i.e., schools, public safety buildings, city halls and county courthouses), public infrastructure (i.e., roads, water and sewer systems) and various other projects authorized by law. Key factors that affect a government's need and ability to borrow funds for infrastructure development include population changes, revenue sources, tax rates and levies, interest rates and construction costs. Local governments issue two main types of debt – tax (general obligation or GO) and revenue. General obligation debt is secured by the full faith and credit of the issuer's tax revenue while revenue debt is secured by a specified revenue source.

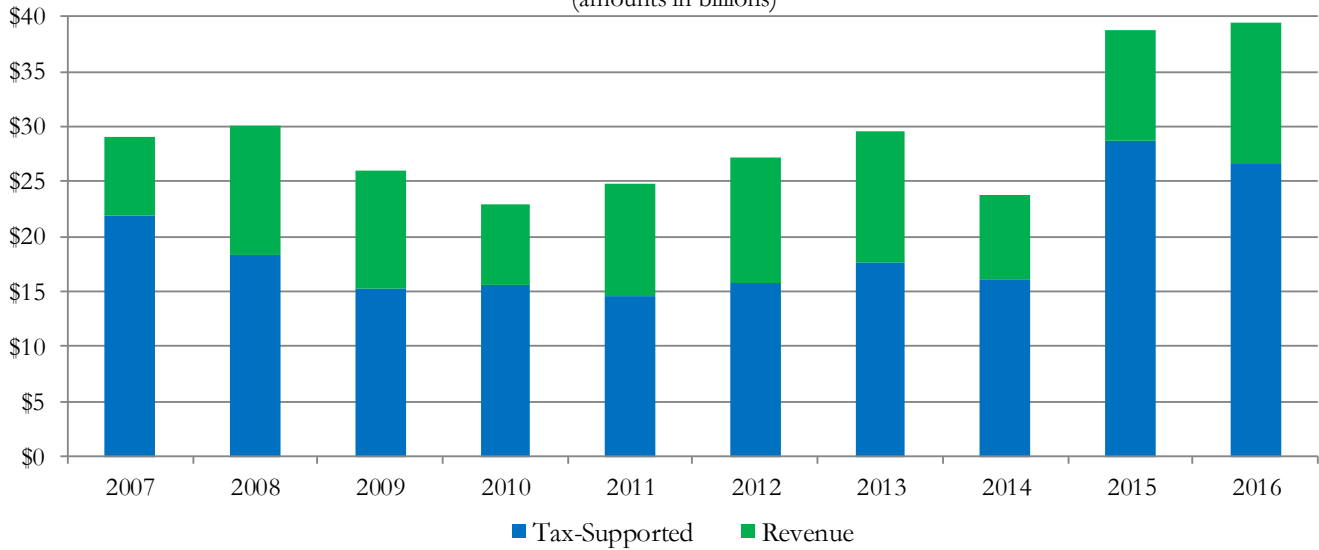
State law sets limitations on certain local government debt issuers by setting maximum

Figure 1.5
Nationwide Government Debt Issuance
(amounts in billions)



Source: The Bond Buyer

Figure 1.6
Texas Local Government Debt Issuance
 (amounts in billions)



Source: Texas Bond Review Board - Bond Finance

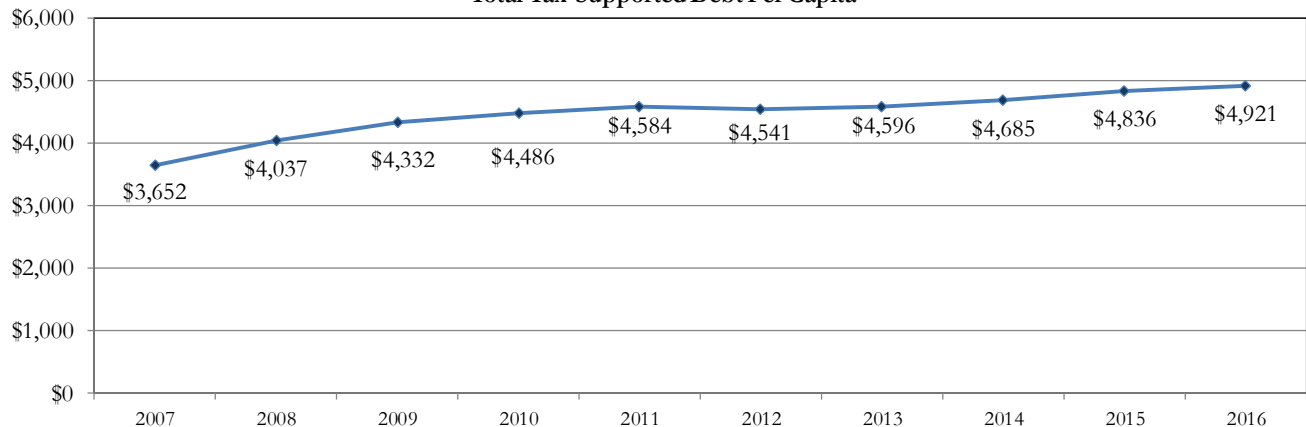
ad valorem tax rates per \$100 of assessed property valuation. These rates vary by government type, but all must generate sufficient funds based on annual ad valorem tax collections to provide for the payment of the debt service on outstanding and projected ad valorem tax (GO) debt. Additionally, all public securities issued by local debt issuers must be approved by the Office of the Attorney General – Public Finance Division (OAG) and registered with the Texas Comptroller of Public Accounts. For

reporting purposes issuances that combine both tax-supported and revenue bonds are categorized as tax-supported debt.

Texas Bond Review Board and Local Government Debt

The Texas Bond Review Board (BRB) has no direct oversight of local government debt issuance. Chapter 1231 of the Texas Government Code requires the BRB to prepare statistical reports on local government debt. This information on debt issued by

Figure 1.7
Texas Local Government
Total Tax-Supported Debt Per Capita*



*Includes debt secured by a combination of ad valorem taxes and other revenue sources.

Source: Texas Bond Review Board - Bond Finance Office; July 2015 U.S. Census Bureau, Population Division.

political subdivisions is primarily collected by the OAG in its review and approval of public securities under Chapter 1202 of the Government Code and then forwarded to the BRB for its report on local debt statistics pursuant to Section 1202.008 of the Government Code. Certain conduit revenue debt incurred by nonprofit corporations as well as local indebtedness not approved by the OAG will not be reflected in this report.

All reporting on local debt is presented on the agency's website. Visitors to the site can search databases and download spreadsheets that contain debt outstanding, debt ratios and population data by government type at each fiscal-year end. The BRB posts this information to its website annually within four months after the close of the fiscal year. In fiscal 2016, approximately 5,030 different users of the BRB's website downloaded over 18,500 spreadsheets containing Texas local government debt data.

The BRB separates the local government issuances into seven categories: Cities, Towns,

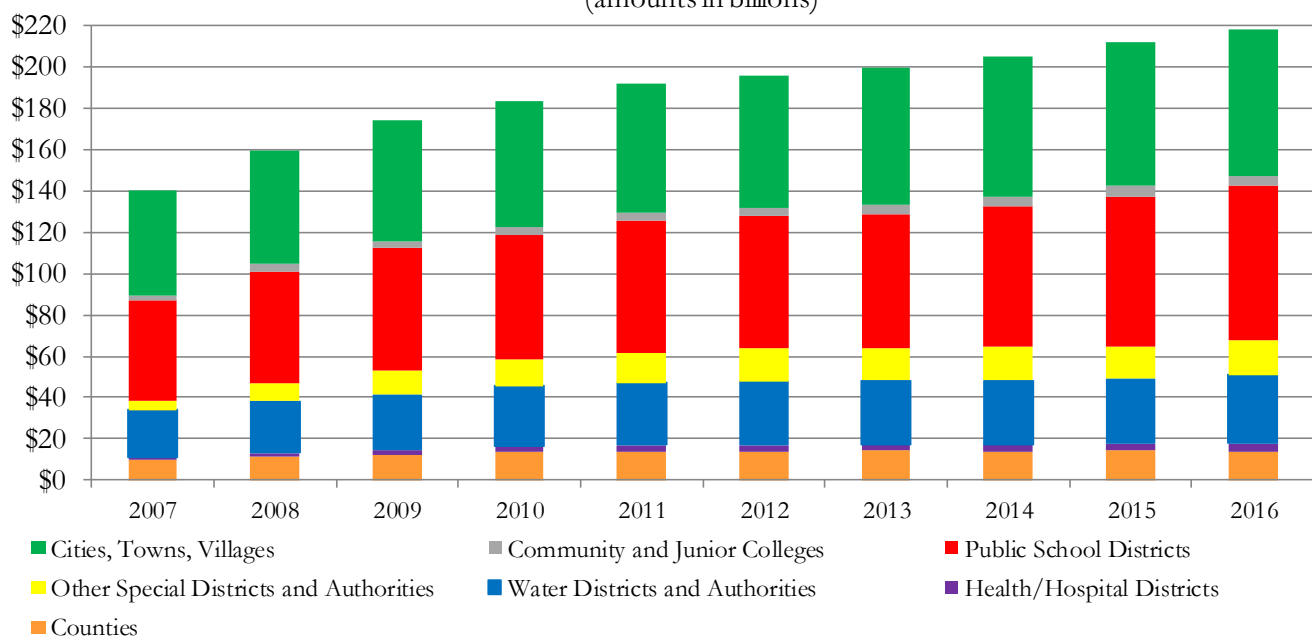
Villages (Cities); Public School Districts (School Districts); Water Districts and Authorities (WD); Counties; Other Special Districts and Authorities (OSD); Community and Junior Colleges (CCD); and Health/Hospital Districts and Authorities (HHD).

The data in this report and on the website is compiled from information provided to the Bond Review Board from various sources and has not been independently verified.

Nationwide Debt Issuance Continues to Decline from Peak Years

Over the past decade nationwide issuance of government debt has fluctuated from issuances totaling \$442.30 billion in fiscal 2007 to a total of \$404.0 billion issued in fiscal 2016 (*Figure 1.5*). Texas issuance of local debt has fluctuated over the past decade from a low of \$22.97 billion in fiscal 2010 to a high of \$39.49 in fiscal 2016, a slight increase of 1.8 percent from fiscal 2015. (*Figure 1.6*).

Figure 1.8
Texas Local Government
Debt Outstanding by Fiscal Year
(amounts in billions)



Source: Texas Bond Review Board - Bond Finance Office

Majority of Local Debt Issuance Supports Educational Facilities and Equipment

During the five-year reporting period, 39.9 percent of Texas' new-money local debt issuance was used to finance educational facilities and equipment including school buses. General-purpose debt, which includes public improvements, continued to be the second highest use (21.4 percent), and the third highest use (17.1 percent) was for water-related financings. (This figure was likely understated because some issuers, especially cities, borrow for multiple purposes in one transaction, over half of which involve financings for water and transportation purposes). The fourth highest use (11.3 percent) was to finance transportation projects including roads, toll ways, bridges, parking facilities, airports, rapid transit and other public transportation needs including the acquisition of hybrid diesel-electric buses.

The remaining 10.3 percent of local debt issuance was used for the following additional categories: economic development, commerce, recreation, solid waste, recycle materials, prisons/detention, power, combined utility systems, health-related facilities, fire protection, public safety and

pension obligations.

School Districts, Cities and Water Districts Account for more than 82 percent of New-Money and Refunding Transactions

Over the past five fiscal years, new-money debt issuance totaled \$69.76 billion and refunding debt totaled \$89.30 billion. During that time the top three issuers of new-money volume were school districts, cities and water districts that together comprised 84.9 percent of the new-money volume (\$59.2 billion) and 82.7 percent of the refunding transaction volume (\$73.8 billion).

Fiscal 2016 was another high year for refundings at \$22.99 billion, a decrease of 0.7 percent from the record total of \$23.16 billion issued during fiscal 2015. Over the past five fiscal years, 94.1 percent of local governmental refundings achieved both a cash and present value savings, 0.9 percent provided only a net present value savings with a cash loss, and 1 percent resulted in a loss in both. In the latter cases, the primary objective was to restructure debt-service requirements to more evenly match budget flows and thus avoid raising taxes during times of economic

Table 1.7
Texas Local Government
Capital Appreciation Bonds Par Amount Issued by Fiscal Year
(amounts in millions)

	2012	2013*	2014	2015	2016
Public School Districts	\$202.3	\$218.7	\$471.9	\$214.1	70.5
Cities, Towns, Villages	21.3	30.0	-	-	0.7
Water Districts and Authorities	19.5	69.6	1.0	1.8	2.5
Community and Junior Colleges	2.5	2.2	1.0	-	-
Health/Hospital Districts	0.1	0.0	1.3	-	-
Other Special Districts and Authorities	-	-	-	-	-
Counties	1.8	-	1.4	-	-
Total CAB Par Amount Issued	\$247.5	\$320.5	\$476.7	\$215.9	\$73.8
Total Par Amount Issued**	\$27,014.5	\$29,548.7	\$23,586.8	\$38,779.0	\$39,490.5
CAB Par Amount % of Total	0.9%	1.1%	2.0%	0.6%	0.2%

* HHDs issued \$30,000 in CABs

** Includes current interest bonds

Source: Bond Review Board - Bond Finance Office

weakness.

Since fiscal 2012, refundings for Texas local issuers achieved cash savings of \$12.13 billion with a present value savings of \$9.54 billion including \$3.81 billion in cash savings and \$2.94 billion in present value savings realized in fiscal 2016.

Capital Appreciation Bonds

During fiscal 2016 local governments issued \$73.8 million of capital appreciation bonds (CABs), a decrease of 66.1% from fiscal 2015, additionally CABs only account for approximately 0.2 percent of the total par amount issued by Texas local governments. School Districts issued approximately 95.6 percent of the total CABs issued by local governments during fiscal 2016 (Table 1.7).

CABs are sold at a discounted price called the par amount. They are often sold in combination with current interest bonds (CIBs). While the debt service for CIBs is paid throughout the life of the obligation, principal and interest on CABs is paid at maturity. Interest on CABs compounds semiannually and accumulates over the life of the bond, and the amount paid at the maturity is called the maturity value. Interest rates for CABs are generally higher than for CIBs.

The total debt outstanding figures are understated to the extent that these bonds are reported at their par issuance price rather than their maturity value.

Local governments issue more premium CABs than non-premium CABs. Premium CABs have lower initial stated par amounts to: (1) lessen the impact of an issuance on par-based debt limits (i.e., the “50-cent test” for school districts as provided in Texas Education Code Section 45.0031), (2) increase the amount of proceeds not subject to debt limits and (3) help local governments reach tax-rate targets.

The 84th Legislature passed House Bill 114, effective September 1, 2015, that prohibits Texas local governments from issuing CABs secured by property taxes with terms of more than 20 years, and (with some exceptions) from refunding CABs to extend their maturity dates. It also limits each government’s CAB debt to no more than 25 percent of its total outstanding bond debt including principal and interest.

Texas Local Governments: \$218.46 Billion of Outstanding Debt

As of fiscal year-end 2016 Texas local governments had \$218.46 billion in outstanding debt (*Table 1.8*), an increase of \$22.99 billion (11.8 percent) since fiscal 2012. Of that amount 61.9 percent (\$135.19 billion) is GO debt to be repaid from local tax collections while the remaining 38.1 percent (\$83.28 billion) will be repaid from revenues generated by various projects such as water, sewer and electric utility fees. Since fiscal 2012, tax-supported debt outstanding increased 16 percent (\$18.60 billion) and revenue debt outstanding increased 5.5 percent (\$4.37 billion).

School Districts accounted for 34.3 percent (\$74.91 billion) of all local debt outstanding and Cities accounted for 32.6 percent (\$71.11 billion). Water districts held the third highest percentage and accounted for 15.2 percent (\$33.24 billion) of all local debt outstanding. The remaining 17.9 percent (\$39.16 billion) was held by Community and Junior Colleges, Counties, Health/Hospital Districts and Other Special Districts (*Table 1.8*).

The U.S. Census Bureau data for census years 2012-2013 showed that Texas continued to be ranked 2nd in population, 2nd among the ten most populous states in terms of Local Debt Per Capita, 5th in Total State and Local Debt Per Capita and 9th in State Debt Per Capita.

Total tax-supported debt per capita increased by 1.2 percent from \$4,836 in fiscal 2015 to

\$4,921 in fiscal 2016. Over the past 10 years debt per capita has increased by 34.8 percent (\$1,270) while the state's population has increased by 17.4 percent (4.1 million) (*Figure 1.7*).

Over the past decade, total debt outstanding increased by 55.7 percent from \$140.28 billion to \$218.45 billion. During this period debt for School Districts increased 54.7 percent from \$48.43 billion to \$743.91 billion. Other notable increases included Other Special Districts (roads, power and housing issuances) which increased 282.8 percent from \$4.32 billion to \$16.55 billion and Hospital Districts which increased 171.1 percent from \$1.29 billion to \$3.49 billion (*Figure 1.8*).

Tax-Supported Debt Rises 16 Percent in Five Years

Total Tax-supported debt has increased from \$116.85 billion in fiscal 2012 to \$135.19 billion in fiscal 2016 (16.0 percent) (*Table 1.9*).

Tax-supported debt for Texas school districts increased over the past five years from \$63.69 billion in fiscal 2012 to \$74.60 billion in fiscal 2016 (17.1 percent) while public school attendance for districts with debt outstanding increased by 4.9 percent to 4,616,295 students. School district debt is primarily used to finance instructional facilities while only a handful of school districts carry revenue debt for constructing, improving and equipping athletic/stadium facilities.

Over the five-year period tax-supported debt carried by Texas cities, towns and villages has increased from \$29.97 billion to \$30.58 billion (13.4 percent) and accounted for 22.6 percent of all tax-supported debt.

Tax-supported debt for water districts including navigation and port districts, river authorities, municipal utility districts (MUDs) and municipal water authorities increased from \$10.09 billion to \$12.54 billion (24.3 percent) and accounted for 9.3 percent of all

tax-supported debt. During the same period, county tax-supported debt increased from \$10.59 billion to \$11.22 billion (6.0 percent).

During the past five fiscal years, enrollment for the 50 junior and community college districts in Texas has decreased slightly from 796,755 to 769,880 (3.4 percent). Tax-supported debt outstanding increased from \$2.96 billion to \$3.68 billion (24.4 percent) during the same time period.

During the five-year period, tax-supported debt for health/hospital districts increased from \$2.09 billion to \$2.39 billion (14.3 percent). Population increases along with the increasing healthcare needs of aging baby boomers also contributed to increased debt issuance. In addition, aging healthcare facilities continue to be renovated or replaced to accommodate advances in medical technology, energy efficiency and to comply with new fire and building codes.

During the five-year period, tax-supported debt for Other Special districts decreased from \$198.4 million to \$177.1 million (10.7 percent). This decrease was only seen in tax supported debt as a majority of Other Special District issuances are issued as revenue debt.

Revenue Debt – 5.6 Percent Increase in Five Years

Since fiscal 2012 revenue debt has increased by 5.6 percent (\$4.37 billion) from \$78.89 billion to \$83.28 billion (*Table 1.9*).

City revenue debt increased by 11.5 percent from \$36.38 billion to \$40.55 billion in the five-year period. As the state's population increased by 7.0 percent (1.8 million) since fiscal 2012, urban areas have experienced particularly rapid growth that has created the need for new infrastructure including roads and construction for new and expanded water and sewer systems. The majority of city revenue debt has been used to finance utility-

related projects including water, wastewater and in some localities, electric utility systems.

Since fiscal 2012, Community College Districts revenue debt rose by 2.8 percent from \$1.30 billion to \$1.33 billion as a response to increased enrollments, and revenue debt for Other Special Districts increased 4.1 percent from \$15.72 billion to \$16.37 billion.

Table 1.8
Texas Local Governments
Debt Outstanding As of August 31, 2016
(amounts in millions)

Type of Issuer		Tax-Supported*	Revenue**	Total Debt
Public School Districts	Voter-approved tax	73,805.6		73,805.6
	Maintenance tax (ed. equipment)	795.9		795.9
	Lease-purchase contracts		309.4	309.4
	Revenue (athletic facilities)		1.8	1.8
	Subtotal	\$ 74,601.5	\$ 311.2	\$ 74,912.7
Cities, Towns, Villages	Tax	30,579.6		30,579.6
	Revenue		39,707.5	39,707.5
	Sales Tax		219.5	219.5
	Lease-purchase contracts		619.7	619.7
	Subtotal	\$ 30,579.6	\$ 40,546.7	\$ 71,126.3
Water Districts and Authorities	Tax	12,536.3		12,536.3
	Revenue		12,800.1	12,800.1
	Conduit revenue		7,907.6	7,907.6
	Subtotal	\$ 12,536.3	\$ 20,707.7	\$ 33,244.0
Other Special Districts and Authorities	Tax	177.1		177.1
	Revenue		11,497.9	11,497.9
	Sales Tax		4,768.6	4,768.6
	Lease-purchase contracts		103.8	103.8
	Subtotal	\$ 177.1	\$ 16,370.3	\$ 16,547.5
Counties	Tax	11,221.3		11,221.3
	Revenue		2,453.5	2,453.5
	Lease-purchase contracts		457.4	457.4
	Subtotal	\$ 11,221.3	\$ 2,910.8	\$ 14,132.2
Community and Junior Colleges	Tax	3,676.8		3,676.8
	Revenue		1,113.0	1,113.0
	Lease-purchase contracts (ed. Facilities)		220.3	220.3
	Subtotal	\$ 3,676.8	\$ 1,333.3	\$ 5,010.1
Health/Hospital Districts and Authorities	Tax	2,392.4		2,392.4
	Revenue		58.7	58.7
	Sales Tax		1,040.4	1,040.4
	Subtotal	\$ 2,392.4	\$ 1,099.1	\$ 3,491.5
Total Local Debt Outstanding		\$ 135,185.1	\$ 83,279.2	\$ 218,464.2

*Includes debt secured by a combination of ad valorem taxes and other revenue sources.

**Does not include certain conduit debt issued for which the Bond Review Board does not receive issuance information.

Source: Texas Bond Review Board - Bond Finance Office

Table 1.9
Texas Local Government
Debt Outstanding by Fiscal Year
(amounts in millions)

	8/31/2012	8/31/2013	8/31/2014	8/31/2015	8/31/2016
Public School Districts					
Tax-Supported*	\$63,687.3	\$64,844.3	\$67,704.9	\$71,990.8	\$74,601.5
Revenue**	332.8	318.6	275.6	337.8	311.2
Total	\$64,020.1	\$65,162.9	\$67,980.6	\$72,328.7	\$74,912.7
Cities					
Tax-Supported*	\$26,974.1	\$27,736.8	\$28,402.3	\$29,537.1	\$30,579.6
Revenue**	36,377.0	38,565.0	39,389.4	40,147.5	40,546.7
Total	\$63,351.1	\$66,301.8	\$67,791.7	\$69,684.6	\$71,126.3
Water Districts and Authorities					
Tax-Supported*	\$10,087.3	\$10,373.5	\$10,749.7	\$11,380.7	\$12,536.3
Revenue**	20,805.1	20,386.3	20,150.7	19,941.8	20,707.7
Total	\$30,892.3	\$30,759.8	\$30,900.4	\$31,322.5	\$33,244.0
Other Special Districts and Authorities					
Tax-Supported*	\$198.4	\$191.8	\$201.1	\$194.2	\$177.1
Revenue**	15,720.2	15,303.3	15,663.2	15,748.5	16,370.3
Total	\$15,918.7	\$15,495.1	\$15,864.3	\$15,942.6	\$16,547.5
Counties					
Tax-Supported*	\$10,586.9	\$11,098.0	\$11,112.1	\$11,259.7	\$11,221.3
Revenue**	3,223.4	3,061.1	2,980.6	3,031.8	2,910.8
Total	\$13,810.3	\$14,159.0	\$14,092.8	\$14,291.5	\$14,132.2
Community College Districts					
Tax-Supported*	\$2,956.4	\$3,314.4	\$3,351.1	\$3,612.4	\$3,676.8
Revenue**	1,296.5	1,358.1	1,413.0	1,392.9	1,333.3
Total	\$4,252.9	\$4,672.5	\$4,764.1	\$5,005.2	\$5,010.1
Health/Hospital Districts and Authorities					
Tax-Supported*	\$2,093.1	\$2,213.0	\$2,378.4	\$2,375.7	\$2,392.4
Revenue**	1,137.2	1,192.3	1,061.2	1,092.7	1,099.1
Total	\$3,230.3	\$3,405.4	\$3,439.6	\$3,468.3	\$3,491.5
Total Tax-Supported*	\$116,583.3	\$119,771.8	\$123,899.7	\$130,350.5	\$135,185.1
Total Revenue**	\$78,892.3	\$80,184.7	\$80,933.7	\$81,693.0	\$83,279.2
Total Debt Outstanding	\$195,475.7	\$199,956.6	\$204,833.4	\$212,043.5	\$218,464.2

*Includes debt secured by a combination of ad valorem taxes and other revenue sources.

**Does not include certain conduit debt issued for which the Bond Review Board does not receive issuance information.

Source: Texas Bond Review Board - Bond Finance Office

Chapter 2

State Debt Issued in FY 2016 and Debt Outstanding

In fiscal year 2016 the state's total debt outstanding increased 5.7 percent to \$49.75 billion compared to \$47.09 billion in fiscal 2015 and \$44.33 billion in fiscal 2014.

Bonds issued by Texas state agencies, colleges and universities during fiscal year 2016 decreased by 20.8 percent to an aggregate total of \$7.26 billion compared to \$9.17 billion issued in fiscal 2015. Fiscal year 2016 issues included \$4.57 billion in new-money and \$2.69 billion in refunding bonds. Other debt issued included \$1.87 billion of commercial paper.

Detail on bond transactions can be found in Appendix A, and detail on commercial paper and variable-rate notes can be found in Appendix B.

New-Money Issuances Increase While Refunding Bond Issuances Decline in FY 2016

A total of \$7.26 billion in bonds were issued in fiscal year 2016. Of that amount \$4.57 billion

(62.9%) was issued as new-money bonds, an increase of \$633.4 million (16.1%) from \$3.94 billion issued during fiscal 2015. The remaining \$2.69 billion (37.1%) was issued as refunding bonds, a decrease of \$2.54 billion (48.6%) from \$5.23 billion issued during fiscal year 2015.

Aggregate new money issuances in fiscal 2016 totaled \$4.57 billion, an increase of 16.1 percent from the \$3.94 billion issued in fiscal 2015. Refunding bond issuances totaled \$2.69 billion, a decrease of 48.6 percent from the \$5.23 billion issued in fiscal 2015 (*Figure 2.1*). Net present value savings from fiscal 2016 refundings totaled \$242.2 million.

Of the \$4.57 billion in new-money bonds issued in fiscal 2016, approximately \$1.17 billion (25.5%) was issued by UTS, \$1.14 billion (24.8%) was issued by TWDB, and \$615.0 million (13.4%) was issued by TTC.

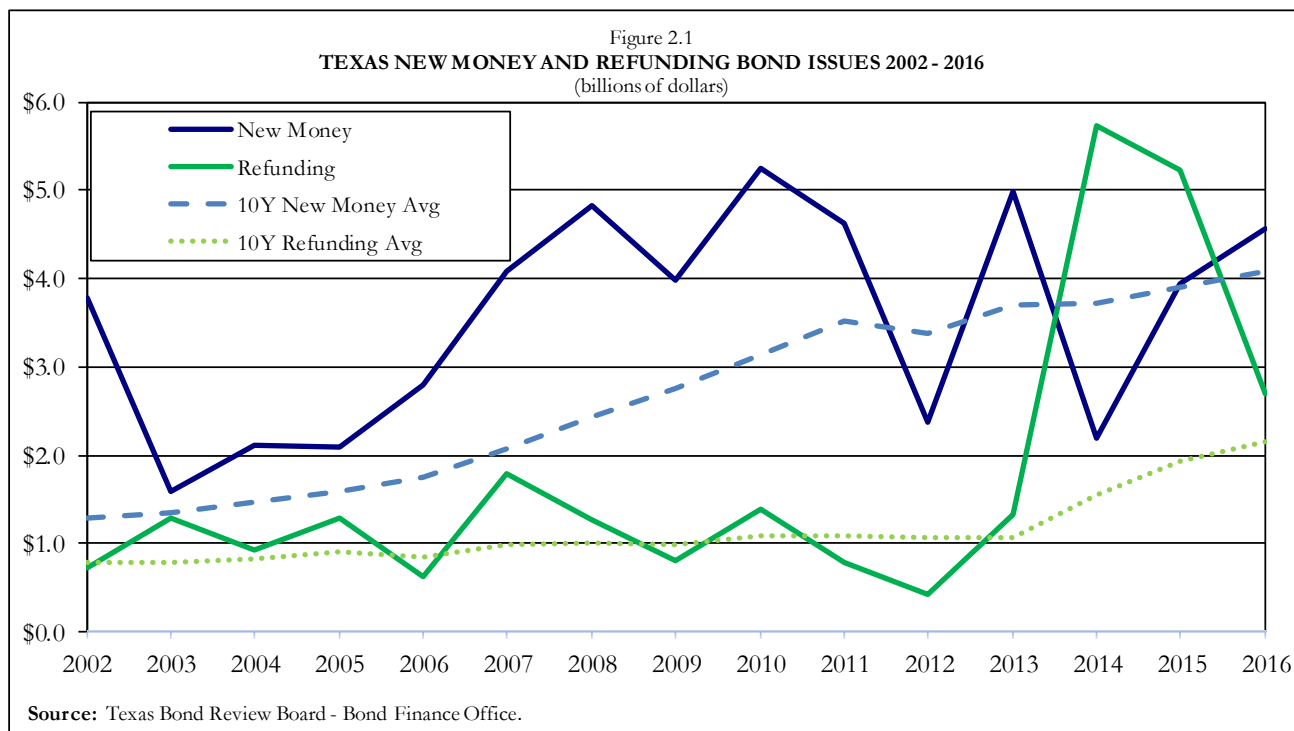


Table 2.1 TEXAS BONDS ISSUED DURING FISCAL 2016 SUMMARIZED BY ISSUER				
ISSUER	REFUNDING		NEW-MONEY	
	BONDS	BONDS	ISSUED	TOTAL BONDS
				New-Money Use of Proceeds
Texas Public Finance Authority	\$ 457,520,000	\$ 69,800,000	\$ 527,320,000	CPRIT Program
Texas Transportation Commission	1,165,465,000	615,000,000	1,780,465,000	Highway improvement projects
Private Activity Bond Surface Trans. Corp.	-	272,635,000	272,635,000	Highway improvement projects
Texas Water Development Board	104,970,000	1,135,510,000	1,240,480,000	Water Financial Assistance Programs and SWIFT
Texas State Technical College	19,330,000	61,265,000	80,595,000	Acquire, purchase, construct, and equip various facilities
The Texas A&M University System	533,900,000	406,850,000	940,750,000	Acquire, purchase, construct, and equip various facilities
The University of Texas System	80,790,000	1,167,000,000	1,247,790,000	Acquire, purchase, construct, and equip various facilities
University of North Texas System	200,530,000	23,500,000	224,030,000	Acquire, purchase, construct, and equip various facilities
University of Houston System	63,605,000	221,395,000	285,000,000	Acquire, purchase, construct, and equip various facilities
Texas Woman's University	-	19,160,000	19,160,000	Acquire, purchase, construct, and equip various facilities
Texas Veterans Land Board	-	250,000,000	250,000,000	Veteran's Home Loan Program
Texas Higher Education Coordinating Board	-	150,000,000	150,000,000	College Student Loan Program
Texas State Affordable Housing Corporation	-	5,750,000	5,750,000	Multifamily bonds
Texas Dept. of Housing and Comm. Affairs	65,335,000	175,015,000	240,350,000	Single family mortgage bonds and multifamily bonds
Total Texas Bonds Issued	\$ 2,691,445,000	\$ 4,572,880,000	\$ 7,264,325,000	
Note: Table 2.1 includes private placements. Excludes commercial paper and variable-rate notes. See Table B1, Appendix B, for these issuances.				
Source: Texas Bond Review Board - Bond Finance Office.				

Of the \$2.69 billion in refunding bonds issued in fiscal 2016, TTC issued \$1.17 billion (43.3%), TAMUS issued \$533.9 million (19.8%), TPFA issued \$457.5 million (17.0%) and UNTS issued \$200.5 million (7.5%) (*Table 2.1*).

Build America Bonds Outstanding for FY 2016

In fiscal year 2009 the American Recovery and Reinvestment Act of 2009 (ARRA) created Build America Bonds (BABs) that could be issued as Tax Credit BABs or Direct-Payment BABs. Authority to issue BABs expired on December 31, 2010. As of August 31, 2016 TTC, UTS, TPFA and UHS had \$2.02 billion, \$1.64 billion, \$181.8 million and \$80.0 million of BABs outstanding, respectively.

Under the Budget Control Act of 2011, across-the-board sequestration took effect on March 1, 2013, and direct-pay bonds such as BABs experienced a 7.6 percent reduction in federal subsidy. The Internal Revenue Service reported that effective October 1, 2014, issuers of BABs and other direct-pay bonds would have their subsidy payments processed in FY 2015 reduced by 7.3 percent. As a result, the 35 percent federal subsidy on BABs interest payments was reduced to the current 32.4 percent.

Interim Financing Decreases in FY 2016

Several state agencies and institutions of higher education have established variable-rate debt financing programs that provide financing for equipment or capital projects or provide loans to eligible entities.

As of August 31, 2016 a total of \$7.71 billion was authorized for state commercial paper (CP) or variable-rate note (VRN) programs. Of this amount \$2.55 billion was outstanding at fiscal-year end (*Table B1 in Appendix B*), approximately \$33.2 million less than the amount outstanding at fiscal year-end 2015.

Additional information about individual CP and VRN programs is included in Appendix B.

Projected Issuances in FY 2017

Texas state issuers expect to issue approximately \$7.74 billion in bonds, CP and VRN during fiscal 2017 (*Table 2.2*), a projected decrease of \$2.61 billion (25.2%) over the amount projected for fiscal 2016.

General Obligation Debt Outstanding Increases in FY 2016

Texas General Obligation (GO) debt has a constitutional pledge of the full faith and credit of the state to repay the debt and requires passage of a proposition by a vote of two-

Table 2.2 TEXAS STATE DEBT ISSUES EXPECTED DURING FISCAL 2017			
ISSUER	APPROXIMATE AMOUNT	PURPOSE	APPROXIMATE ISSUE DATE
General Obligation Debt			
Self-Supporting			
Texas Higher Education Coordinating Board	\$180,000,000	College Student Loan Bonds	Dec-16
Texas Transportation Commission	700,000,000	Texas Mobility Fund GO Refunding Bonds	Jan-17
Texas Public Finance Authority	26,000,000	Texas Military Value Loan Program Refunding Bonds	Nov-16
Texas Veterans Land Board	250,000,000	Proceeds will be used to augment the Veterans' Housing Assistance Program	Jan-17
Texas Water Development Board	TBD	DFUND New Money bonds	May-17
Total Self-Supporting	\$1,156,000,000		
Not Self-Supporting			
Texas Public Finance Authority	TBD	Cancer Prevention and Research Institute of Texas Refunding Bonds	TBD
Texas Public Finance Authority	TBD	Refunding Bonds	TBD
Texas Transportation Commission	\$700,000,000	Prop 12 Highway GO Bonds	Nov-16
Total Not Self-Supporting	\$700,000,000		
Total General Obligation Debt	\$1,856,000,000		
Non-General Obligation Debt			
Self-Supporting			
Texas Dept. of Housing and Comm Affairs	30,000,000	Single Family First-Time Home Buyer Program	Mar-17
Texas Dept. of Housing and Comm Affairs	50,000,000	Single Family First-Time Home Buyer Program	Aug-17
Texas Department of Transportation	615,000,000	State Highway Fund Revenue Bonds	Oct-16
Texas Department of Transportation	300,000,000	State Highway Fund Revenue Refunding Bonds	Mar-17
Texas Department of Transportation	TBD	Midtown Express SH 183 TIHA Loan	TBD
Texas Water Development Board	574,885,000	SWIFT New Money Bonds	Sep-16
Texas Water Development Board	TBD	Drinking Water State Revolving Fund	Mar-17
Stephen F. Austin State University	46,400,000	New Stem Building	TBD
Texas Southern University	60,000,000	Construct Robert J. Terry Library	Sep-16
Midwestern State University	84,040,000	Academic expansion and revitalization project	Sep-16
Texas State Technical College	10,000,000	Purchase of furnishings and instructional equipment at the various TSTC campuses	TBD
Texas State University System	12,500,000	LIT - Technical Arts Buildings (Renovation and New Construction)	Jan-17
Texas State University System	10,000,000	LSC-O - Multipurpose Educational Building (New Construction)	Jan-17
Texas State University System	8,080,000	LSC-PA - Facility Expansion for Technical Arts (New Construction)	Jan-17
Texas State University System	60,000,000	LU - Science and Technology Building (New Construction)	Jan-17
Texas State University System	48,000,000	SHSU - Biology Laboratory Building (New Construction)	Jan-17
Texas State University System	6,240,000	SRSU - Renovation and Modernization of Ed Facility - (New Construction)	Jan-17
Texas State University System	63,000,000	Texas State University - Engineering & Science Building (New Construction)	Jan-17
Texas State University System	48,600,000	Texas State University - Round Rock Health Professions I (New Construction)	Jan-17
Texas State University System	41,425,366	Texas State University - LBJ Student Center (New Construction)	Jan-17
Texas Woman's University	54,500,000	Construct Student Union	TBD
Texas Woman's University	51,347,000	Various projects	TBD
Texas Tech University System	311,000,000	New System Admin Bldg, New Honors Residence Hall, Portion of New Sports Performance Center	Mar-17
The Texas A&M University System - RFS*	TBD	Revenue Financing System Bonds/Commercial Paper	TBD
The Texas A&M University System - PUF*	TBD	Permanent University Fund Bonds/Commercial Paper	TBD
The University of Texas System - RFS*	600,000,000	RFS Commercial Paper Notes to provide interim financing for construction and acquisition	TBD
The University of Texas System - PUF*	600,000,000	Provide interim financing for PUF CP Programs for construction and acquisition	TBD
University of Houston System	10,000,000	UH Basketball Arena Renovation	TBD
University of Houston System	2,100,000	Land Acquisition UH Victoria	TBD
University of Houston System	5,661,685	Land Acquisition UH Victoria	TBD
University of Houston System	54,900,000	Academic Building Sugarland	TBD
University of Houston System	14,636,000	Land Acquisition for Katy Academic Building	TBD
University of Houston System	32,196,000	Academic Building Katy	TBD
University of Houston System	80,000,000	Quadrangle Replacement Dorms	TBD
University of Houston System	24,625,000	UH Pearland Construct a Health and Science Classroom	TBD
University of Houston System	25,910,198	UH Clear Lake Recreation and Wellness Center	TBD
University of Houston System	21,711,250	UH Clear Lake Freshman Housing	TBD
University of Houston System	60,000,000	UH Downtown Science & Technology Building	TBD
University of Houston System	12,571,525	UH Victoria Science Technology and Math Building	TBD
University of Houston System	9,000,000	Student Cente UH Victoria	TBD
University of Houston System	6,600,000	UH Victoria Remodel the Regional Development Center Building	TBD
University of Houston System	16,000,000	Learning Commons UH Victoria	TBD
University of North Texas System	179,900,000	Various projects	TBD
Total Self-Supporting	\$4,239,929,024		
Not Self-Supporting			
Texas Public Finance Authority*	TBD	CP Programs	TBD
Total Not Self-Supporting	\$0		
Total Non-General Obligation Debt	\$4,239,929,024		
Conduit Debt			
Grand Parkway Transportation Corp.	89,000,000	Grand Parkway Refunding Bonds	Dec-16
Grand Parkway Transportation Corp.	1,400,000,000	Grand Parkway Bonds	Mar-17
TPFA Charter School Finance Corporation	TBD	Charter School Financing	TBD
Texas State Affordable Housing Corporation	21,300,000	Multi-Family Residential Bond Projects	Dec-16
Texas Dept. of Housing and Comm Affairs	130,000,000	Multi-Family Residential Bond Projects	TBD
Total Conduit	\$1,640,300,000		
Total All Debt	\$7,736,229,024		
*Commercial Paper or Variable-Rate Note Program			
Source: Texas Bond Review Board - Bond Finance Office.			

thirds of both houses of the Texas Legislature and a majority of Texas voters.

As of fiscal year-end 2016, \$18.27 billion (36.7%) of the state's \$49.75 billion in total debt outstanding was backed by the state's GO pledge, an increase of \$954.1 million (5.5%) from the \$17.31 billion backed by the GO pledge at the end of fiscal 2015 (*Figure 2.2 and Table 2.3*). The increase was primarily the result of issuances of \$615.0 million of TTC Highway Improvement bonds and \$325.1 million of TWDB Water Financial Assistance bonds.

Governmental Revenue Debt Outstanding Increases in FY 2016

The repayment of revenue debt is dependent on project revenue or revenue from a designated fund. The Constitution prohibits any pledge of state funds beyond the current biennium. Investors may require a higher rate of interest to compensate for the additional risks associated with revenue debt.

Excluding conduit and component debt, \$25.20 billion (50.6%) of the state's \$49.75 billion in total debt outstanding as of fiscal

year-end 2016 was backed by non-GO revenue pledges, an increase of \$1.54 billion (6.5%) from the \$23.66 billion backed by non-GO revenue pledges at the end of fiscal 2015 (*Figure 2.2 and Table 2.3*).

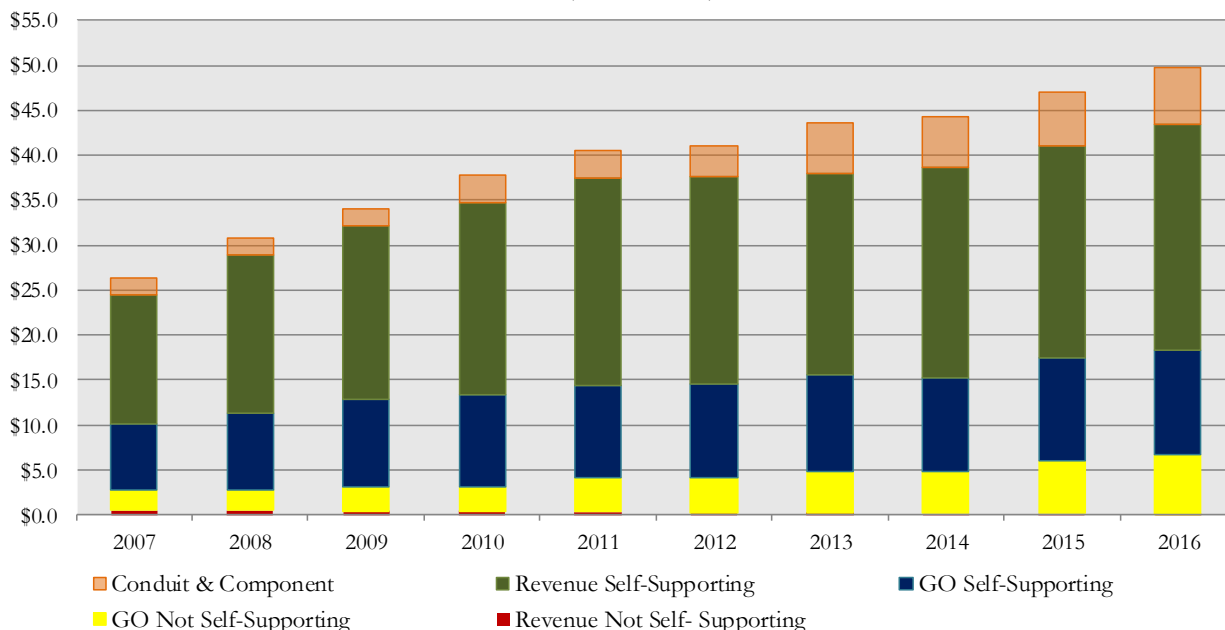
Colleges and universities are the largest issuer of revenue debt with \$12.87 billion outstanding. See *Table 2.5* and *Table 2.6* for more detail on college and university debt outstanding.

Conduit Revenue and Component Debt

The state is authorized by statute to issue conduit debt for certain purposes including charter schools, transportation, single family mortgages, multifamily dwellings and economic development. Debt-service for conduit debt is typically provided by project revenue and is secured by a third party.

Although conduit revenue debt obligations bear the name of the agency as the issuer, the agency is not financially liable for the debt beyond the revenues provided by a lease or loan with the third party on whose behalf they are issued. For example, the Texas Department

Figure 2.2
STATE OF TEXAS DEBT OUTSTANDING
(amounts in billions)



Source: Texas Bond Review Board - Bond Finance Office

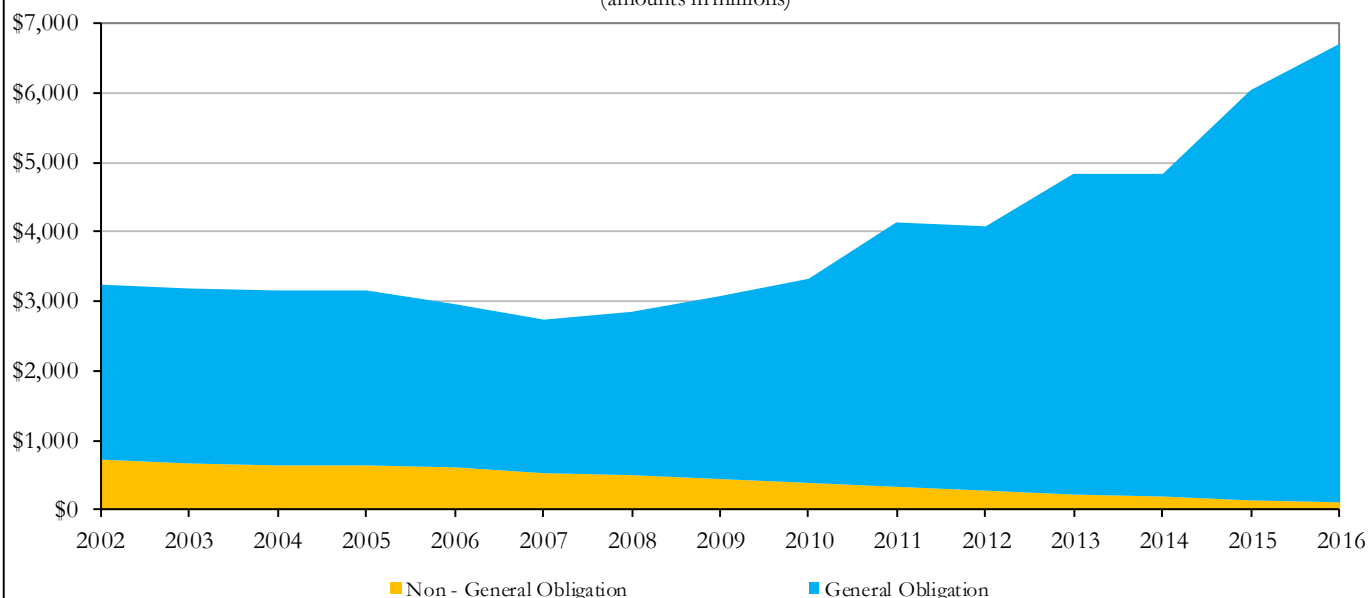
Table 2.3

STATE OF TEXAS DEBT OUTSTANDING

(amounts in thousands)

	8/31/2012	8/31/2013	8/31/2014	8/31/2015	8/31/2016
General Obligation Debt					
Self-Supporting					
Veterans' Land and Housing Bonds	\$2,113,682	\$2,381,811	\$2,437,480	\$2,672,253	\$2,782,245
Water Development Bonds	1,046,030	1,197,775	1,127,385	1,090,430	1,308,360
Water Development Bonds-State Participation	113,930	121,590	119,825	118,340	113,080
Water Development Bonds - WIF	222,200	217,765	208,990	199,855	190,375
Economic Development Bank Bonds	45,000	45,000	45,000	45,000	45,000
College Student Loan Bonds	825,100	751,925	812,950	826,965	920,595
Texas Agricultural Finance Authority	9,000	9,000	9,000	6,750	5,250
Texas Mobility Fund Bonds	6,010,910	5,957,720	5,648,660	6,400,485	6,268,985
Texas Public Finance Authority - TMVRLF	48,680	47,400	36,370	35,220	34,015
Total, Self-Supporting	\$10,434,532	\$10,729,986	\$10,445,660	\$11,395,298	\$11,667,905
Not Self-Supporting¹					
Higher Education Constitutional Bonds ²	\$32,067	\$22,962	\$17,955	\$6,521	\$35,204
Texas Public Finance Authority Bonds	1,713,250	1,652,310	1,623,567	1,512,875	1,395,260
Cancer Prevention and Research Institute of Texas	358,520	343,450	486,595	716,440	966,520
Park Development Bonds	9,925	8,480	7,010	5,260	3,725
Water Development Bonds - EDAP ³	197,100	211,220	195,240	216,210	236,830
Water Development Bonds - State Participation	35,080	0	0	0	0
Water Development Bonds - WIF	511,210	526,290	497,615	468,755	439,450
TTC GO Transportation Bonds	957,650	1,854,835	1,814,690	2,991,410	3,521,965
Total, Not Self-Supporting	\$3,814,802	\$4,619,547	\$4,642,671	\$5,917,471	\$6,598,954
Total General Obligation Debt	\$14,249,334	\$15,349,533	\$15,088,332	\$17,312,769	\$18,266,859
Non-General Obligation Debt					
Self-Supporting					
Permanent University Fund Bonds					
The Texas A&M University System	\$730,295	\$707,905	\$810,430	\$953,145	\$968,675
The University of Texas System	1,753,030	1,816,750	1,960,470	2,169,085	2,615,155
College and University Revenue Bonds ⁴	10,528,915	10,531,928	11,251,859	11,652,483	12,870,655
Texas Water Resources Finance Authority Bonds	0	0	0	0	0
Texas Department of Transportation Bonds - CTTS	2,536,049	2,484,540	2,478,721	2,402,352	2,401,472
Texas Department of Housing & Community Affairs - SF	1,278,105	898,980	694,365	567,675	521,460
Economic Development Program (Leverage Fund)	25,000	25,000	20,000	25,000	20,000
Veterans' Financial Assistance Bonds	0	0	0	0	0
Texas Workforce Commission Unemp Comp Bonds	1,466,625	1,201,255	926,435	628,355	298,625
State Highway Fund	3,963,935	3,843,780	4,460,525	4,461,105	3,972,595
Water Development Bonds - State Revolving Fund	881,493	810,438	774,178	670,115	609,935
Water Development Bonds - SWIRFT	0	0	0	0	810,410
Total, Self-Supporting	\$23,163,447	\$22,320,576	\$23,376,984	\$23,529,316	\$25,088,982
Not Self-Supporting¹					
Texas Public Finance Authority Bonds	\$162,258	\$130,422	\$98,260	\$68,175	\$45,835
TPFA Master Lease Purchase Program	76,790	64,967	62,112	43,019	44,480
Texas Military Facilities Commission Bonds	13,450	12,045	10,585	8,640	7,680
Parks and Wildlife Improvement Bonds	23,700	17,480	14,770	11,150	8,375
Total, Not Self-Supporting	\$276,198	\$224,914	\$185,727	\$130,984	\$106,370
Conduit, Component and Related Organizations⁵					
Texas Windstorm Insurance Association	\$500,000	\$0	\$0	\$500,000	\$458,400
Texas Small Business I.D.C. Bonds	20,000	1,620	0	0	0
Texas Dept. of Housing and Community Affairs Bonds - MF	1,075,881	1,012,353	997,898	965,353	957,970
Texas State Affordable Housing Corporation	432,787	437,162	292,945	280,262	241,536
Texas Grand Parkway Transportation Corporation	0	2,920,075	2,900,940	2,900,940	2,900,940
Texas PAB Surface Transportation Corporation	1,015,000	1,015,000	1,289,030	1,289,030	1,561,665
TPFA Charter School Finance Corporation	259,621	256,395	195,056	176,410	163,646
Total Conduit, Component and Related Organizations	\$3,303,290	\$5,642,605	\$5,675,868	\$6,111,994	\$6,284,157
Total Non-General Obligation Debt	\$26,742,935	\$28,188,096	\$29,238,579	\$29,772,294	\$31,479,509
Total Debt Outstanding	\$40,992,268	\$43,537,628	\$44,326,911	\$47,085,064	\$49,746,368
¹ Not self-supporting debt (general obligation and non-general obligation) depends solely on the state's general revenue fund for debt service.					
² While not explicitly a general obligation or full faith and credit bond, the revenue pledge in Constitutional Bonds has the same effect.					
³ Economically Distressed Areas Program (EDAP) bonds depend on the state's general revenue fund for 90% of their debt service.					
⁴ Tuition Revenue Bonds are included in these totals. See Table 2.5.					
⁵ This section contains debt that is not a legal liability of the state but rather is backed by third party entities.					
Note: Certain lease purchase, SECO LoanSTAR and other revolving loan program debt is not included.					
Source: Texas Bond Review Board - Bond Finance Office.					

Figure 2.3
TEXAS STATE DEBT OUTSTANDING
BACKED BY GENERAL REVENUE (NOT SELF-SUPPORTING)
(amounts in millions)



Source: Texas Bond Review Board - Bond Finance Office.

of Housing and Community Affairs is not liable for debt service for issuances of its multifamily mortgage revenue bonds beyond the revenues it receives from the borrower that is acquiring, constructing, or renovating the multifamily facility.

Component debt obligations are issued by legally separate units of the agency, and the agency is not financially liable for the debt. For example, the Texas Public Finance Authority (TPFA) is not liable for debt service for issuances of the Texas Public Finance Authority Charter School Finance Corporation.

Of the state's \$49.75 billion in debt outstanding as of fiscal year-end 2016, \$6.28 billion (12.6%) was state conduit and component debt which includes \$2.90 billion issued by Grand Parkway Transportation Corporation (GPTC) (*Table 2.3*). As conduit debt, GPTC debt service is payable solely from payments received from transportation projects it finances. The \$6.28 billion of conduit and component debt outstanding represents an increase of \$172.2

million (2.8%) from the \$6.11 billion outstanding at the end of fiscal 2015.

General Revenue Supported Debt Increases in FY 2016

All debt does not have the same financial impact on the state's general revenue. Self-supporting debt relies on sources other than the state's general revenue to pay debt service; thus self-supporting debt does not directly impact state finances. Debt service for not self-supporting debt is primarily derived from the state's general revenue fund and thus draws on the same sources used by the legislature to finance state government.

As of August 31, 2016 Texas had a total of \$6.71 billion in GO and non-GO not self-supporting debt outstanding to be repaid from the state's general revenue compared to \$6.05 billion outstanding at fiscal-year end 2015. During fiscal 2016 non-GO not self-supporting debt decreased by \$24.6 million, but GO not self-supporting debt increased by \$681.4 million for a net increase in not self-supporting debt of \$656.9 million (10.9%) (*Figure 2.3*).

Table 2.3A STATE OF TEXAS VARIABLE RATE DEBT OUTSTANDING (amounts in thousands)					
	8/31/2012	8/31/2013	8/31/2014	8/31/2015	8/31/2016
General Obligation Debt					
Texas Department of Agriculture	\$9,000	\$9,000	\$9,000	\$6,750	\$5,250
Texas Department of Transportation	229,130	225,840	220,740	400,000	400,000
Texas Economic Development Bank	45,000	45,000	45,000	45,000	45,000
Texas Higher Education Coordinating Board	142,785	0	0	0	0
Texas Tech University ¹	0	0	4,456	0	7,642
Texas Public Finance Authority	175,785	276,380	22,500	321,460	284,760
Texas Water Development Board	0	0	0	0	74,925
Veterans Land Board	1,944,560	2,221,600	2,285,780	2,528,325	2,645,575
Total General Obligation Variable Rate Debt	\$2,546,260	\$2,777,820	\$2,587,476	\$3,301,535	\$3,463,152
Revenue Debt					
Texas A&M University System	\$200,000	\$12,325	\$118,753	\$160,705	\$178,962
Texas Department of Housing and Community Affairs	606,800	576,590	544,765	505,650	424,595
Texas Department of Transportation	100,000	325,000	775,000	750,000	400,000
Texas Economic Development Bank	45,000	26,620	20,000	25,000	20,000
Texas Grand Parkway Transportation Corporation	0	943,330	190,730	190,730	190,730
Texas State Affordable Housing Corporation	0	0	11,500	11,500	0
Texas State Technical College	0	0	0	1,730	1,600
Texas State University System	0	0	0	0	2,588
Texas Tech University System	27,160	55,614	110,507	22,483	44,454
Texas Water Development Board	69,118	60,678	48,683	0	0
Texas Public Finance Authority	639,935	126,785	127,810	128,992	150,650
TPFA Charter School Finance Corporation	4,986	4,780	4,556	4,311	4,046
University of Houston System	34,395	59,296	53,031	71,641	56,367
University of North Texas System	41,635	56,522	91,067	157,567	66,015
University of Texas System	1,907,419	2,238,465	2,397,830	2,748,487	3,093,790
Total Revenue Variable Rate Debt	\$3,676,449	\$4,486,005	\$4,494,232	\$4,778,797	\$4,633,797
Total Variable Rate Debt	\$6,222,709	\$7,263,825	\$7,081,708	\$8,080,332	\$8,096,948
¹ While not explicitly a general obligation or full faith and credit bond, the revenue pledge in Constitutional Bonds has the same effect.					
Includes Commercial Paper and Variable-Rate Notes					
Source: Texas Bond Review Board - Bond Finance Office.					

Variable Rate Debt Outstanding Increases in FY 2016

State issuers and institutions of higher education have established variable-rate debt financing programs to provide financing for equipment and capital projects, provide loans to eligible entities, diversify their debt portfolio, and take advantage of lower short-term interest rates.

Variable rate debt outstanding totaled \$8.10 billion in fiscal 2016. Of this amount, approximately \$2.55 billion (31.4%) was short-term commercial paper (CP) or variable-rate notes (VRN), and the remaining \$5.55 billion (68.5%) was long-term variable-rate debt. See *Table B1 in Appendix B* for more information regarding CP and VRN programs.

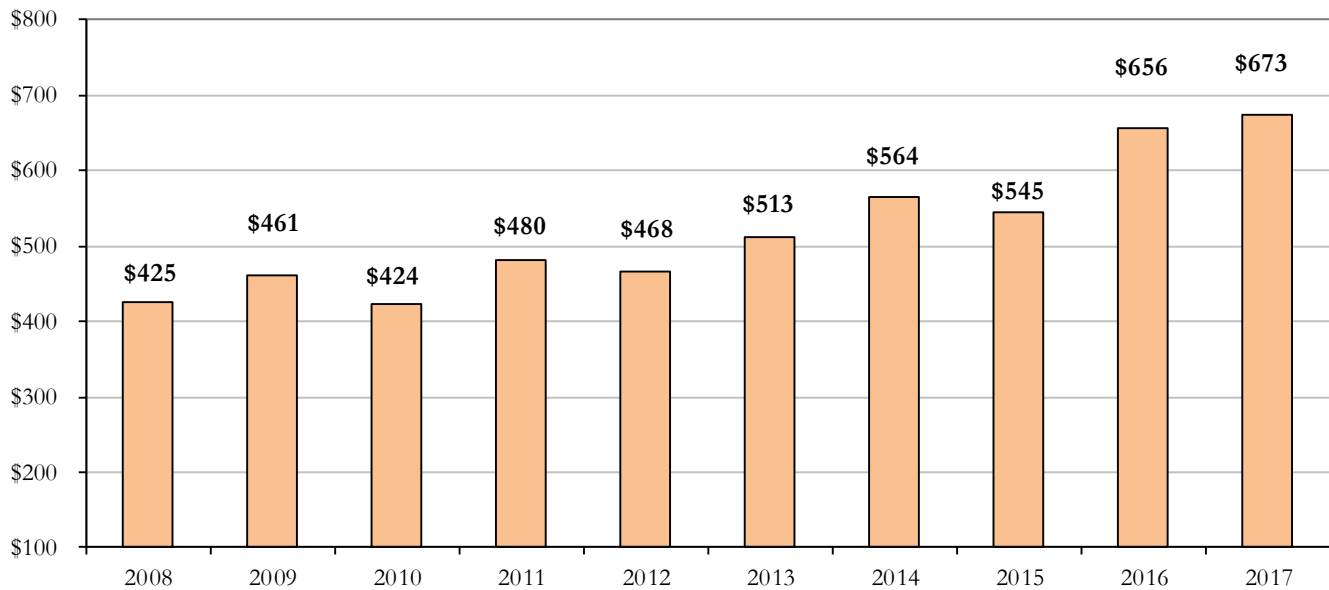
Variable-rate debt increased by approximately \$16.6 million (0.21%) in fiscal 2016 to \$8.10

billion compared with \$8.08 billion outstanding in fiscal 2015. Variable-rate GO debt accounted for \$3.46 billion (42.8%) and revenue debt accounted for \$4.63 billion (57.2%) of the total amount of variable-rate debt outstanding at the end of fiscal year 2016. Variable-rate GO debt increased by \$161.6 million (4.9%) and variable revenue debt decreased by \$145.0 million (3.0%) from amounts outstanding at fiscal-year end 2015 (Table 2.3A).

The largest issuers of variable-debt are: The University of Texas System with \$3.09 billion outstanding, the Veterans' Land Board with \$2.65 billion outstanding, the Texas Department of Transportation with \$800.0 million outstanding, and the Texas Department of Housing and Community Affairs with \$424.6 million outstanding.

Table 2.4 DEBT-SERVICE REQUIREMENTS OF TEXAS STATE DEBT BY FISCAL YEAR						
(amounts in thousands)						
	2017	2018	2019	2020	2021	2022 & beyond
General Obligation Debt						
Self-Supporting						
Veterans' Land and Housing Bonds	\$213,973	\$215,033	\$224,491	\$220,084	\$207,877	\$2,278,089
Water Development Bonds	113,243	112,381	114,774	114,192	112,835	1,518,054
Water Development Bonds - State Participation	8,717	8,610	8,502	7,922	7,141	132,426
Water Development Bonds - WIF	19,242	19,443	21,074	19,763	20,906	162,037
Economic Development Bank Bonds	2,048	2,048	2,048	2,048	2,048	94,034
Park Development Bonds	0	0	0	0	0	0
College Student Loan Bonds	103,382	102,483	102,729	86,164	85,139	839,325
Texas Agriculture Finance Authority	421	419	420	422	417	6,297
Texas Mobility Fund Bonds	352,428	355,309	364,403	371,720	379,165	9,242,152
Texas Public Finance Authority - TMVRLF	3,037	3,036	3,037	3,034	3,032	39,338
Total Self-Supporting	\$816,490	\$818,760	\$841,480	\$825,346	\$818,560	\$14,311,751
Not Self-Supporting ¹						
Higher Education Constitutional Bonds ²	\$5,314	\$5,309	\$5,302	\$4,089	\$3,962	\$19,797
Texas Public Finance Authority Bonds	194,260	186,808	181,084	151,746	146,957	990,354
Park Development Bonds	1,631	843	795	743	0	0
Agriculture Water Conservation Bonds	0	0	0	0	0	0
Cancer Prevention and Research Institute of Texas	85,552	84,885	83,765	82,463	81,018	893,364
Water Development Bonds - EDAP ³	30,606	30,102	29,391	26,209	24,315	171,065
Water Development Bonds - State Participation	0	0	0	0	0	0
Water Development Bonds - WIF	50,949	49,892	48,840	47,731	46,628	358,398
TTC GO Transportation Bonds	271,412	271,102	267,978	264,545	261,086	4,731,749
Total Not Self-Supporting	\$639,725	\$628,942	\$617,154	\$577,527	\$563,966	\$7,164,728
Total General Obligation Debt Service	\$1,456,214	\$1,447,703	\$1,458,634	\$1,402,873	\$1,382,526	\$21,476,479
Non-General Obligation Debt						
Self-Supporting						
Permanent University Fund Bonds						
The Texas A&M University System	\$81,721	\$81,699	\$82,566	\$82,509	\$84,712	\$992,665
The University of Texas System	182,060	182,061	182,058	182,057	182,057	3,539,026
College and University Revenue Bonds	1,230,440	1,213,756	1,191,101	1,158,081	1,144,430	13,639,750
Texas Water Resources Finance Authority Bonds	0	0	0	0	0	0
Texas Department of Transportation Bonds - CTTS	114,936	121,276	127,416	133,766	143,531	4,762,203
Texas Dept of Housing & Community Affairs - SF	19,775	23,213	21,934	19,449	19,902	729,845
Economic Development Program (Leverage Fund)	1,598	1,598	1,598	1,598	1,598	23,977
Veterans' Financial Assistance Bonds	0	0	0	0	0	0
Texas Workforce Commission Unemp Comp Bonds	220,812	90,714	0	0	0	0
State Highway Fund	334,002	331,250	331,247	331,262	331,233	4,157,582
Water Development Bonds - State Revolving Fund	54,061	74,900	49,666	55,890	56,211	581,115
Water Development Bonds - SWIRFT	52,562	52,544	52,539	52,534	52,544	1,209,473
Total Self-Supporting	\$2,291,966	\$2,173,012	\$2,040,127	\$2,017,147	\$2,016,219	\$29,635,635
Not Self-Supporting ¹						
Texas Public Finance Authority Bonds	\$19,216	\$15,555	\$6,710	\$3,506	\$1,596	\$3,578
TPFA Master Lease Purchase Program	9,975	9,128	8,746	8,155	7,448	8,516
Texas Military Facilities Commission Bonds	1,243	1,242	1,253	1,256	1,259	2,762
Parks and Wildlife Improvement Bonds	3,120	3,058	2,090	723	0	0
Total Not Self-Supporting	\$33,554	\$28,983	\$18,799	\$13,640	\$10,302	\$14,856
Conduit, Component and Related Organizations						
Texas Windstorm Insurance Association	\$80,304	\$80,305	\$80,301	\$80,285	\$80,330	\$241,006
Texas Small Business I.D.C. Bonds	0	0	0	0	0	0
Texas Dept. of Housing & Community Affairs - MF	89,956	60,038	54,483	56,658	55,291	1,412,383
Texas State Affordable Housing Corporation	20,674	16,285	16,288	16,291	16,287	403,364
Texas Grand Parkway Transportation Corporation	1,030,028	87,911	87,911	87,911	87,911	5,133,338
Texas PAB Surface Transportation Corporation	104,081	104,081	104,081	104,081	104,081	3,305,641
TPFA Charter School Finance Corporation	12,274	12,441	11,490	11,534	11,534	214,241
Total Conduit, Component and Related Organizations	\$1,337,318	\$361,061	\$354,555	\$356,760	\$355,435	\$10,709,974
Total Non-General Obligation Debt Service	\$3,662,838	\$2,563,055	\$2,413,481	\$2,387,547	\$2,381,956	\$40,360,465
Total Debt Service	\$5,119,052	\$4,010,758	\$3,872,115	\$3,790,421	\$3,764,481	\$61,836,944
¹ Bonds that are not self-supporting (general obligation and non-general obligation) depend solely on the state's general revenue for debt service.						
² While not explicitly a general obligation or full faith and credit bond, the revenue pledge contained in Constitutional Bonds has the same effect. Debt service is paid from annual constitutional appropriation to qualified institutions of higher education from first monies coming into the state treasury not otherwise dedicated by the Constitution.						
³ Economically Distressed Areas Program (EDAP) bonds do not depend totally on the state's general revenue fund for debt service.						
Notes: The debt-service figures do not include the early redemption of bonds under the state's various loan programs or cash defeasances after August 31, 2016, or the Build America Bond subsidy payments. Certain lease purchase, SECO LoanSTAR and other revolving loan program debt is not included.						
Future debt-service payments for variable-rate bonds is calculated based on interest rates provided by the issuer. Future debt-service payments for commercial paper is calculated at five percent for a 20-year period.						
Detail may not add to total due to rounding.						
Source: Texas Bond Review Board - Bond Finance Office.						

Figure 2.4
ANNUAL DEBT SERVICE SCHEDULED TO BE PAID FROM GENERAL REVENUE
(amounts in millions)



Source: Texas Bond Review Board - Bond Finance Office.

Scheduled Debt-Service Payments from General Revenue Increase for FY 2017

During fiscal years 2014, 2015, and 2016 scheduled debt service from general revenue was \$564.4 million, \$544.8 million, and \$656.2 million, respectively. Scheduled debt-service payments from general revenue are expected to increase by 2.6 percent to \$673.3 million in fiscal 2017 (*Figure 2.4*). (See *Table 2.4* for debt-service requirements by fiscal year for Texas state bonds.) See the *State of Texas Annual Cash Report 2016* published by the Texas Comptroller of Public Accounts for actual debt-service paid by the state from General Revenue.

Debt service for tuition revenue bond (TRB) debt is not included in this analysis. Although college and university revenue debt is payable from a pledge of certain “revenue funds” of the applicable system or institution of higher education, pursuant to authorizations to individual institutions in Chapter 55, Texas Education Code, the legislature has historically appropriated funds in an amount equal to all or a portion of the debt service on tuition revenue debt issued. (For revenue debt outstanding and debt-service requirements for each system or

institution, see *Tables 2.5 and 2.6*, respectively.)

Authorized but Unissued Debt Decreases in FY 2016

Authorized but unissued debt is defined as debt that may be issued without further legislative or voter action. As of August 31, 2016 Texas had \$15.92 billion in authorized but unissued debt compared to \$17.64 billion in fiscal 2015 (*Table 2.7*). Of the \$15.92 billion, \$12.10 billion (76.0%) was GO debt, \$9.14 billion (75.6%) of the GO debt was self-supporting and \$2.95 billion (24.4%) was not self-supporting debt. This compares to \$4.08 billion in not self-supporting authorized but unissued GO debt at fiscal year-end 2015. The decrease resulted from new money issuances of \$615.0 million, \$325.1 million, and \$277.3 million by the Texas Transportation Commission, Texas Water Development Board and the Texas Public Finance Authority, respectively.

Authorized but unissued not self-supporting revenue debt totaled \$994.1 million at the end of fiscal 2016 compared to \$995.58 million at fiscal year-end 2015. The remaining authorized

Table 2.5									
TEXAS COLLEGE AND UNIVERSITY REVENUE DEBT OUTSTANDING									
(amounts in thousands)									
College and University Revenue Debt	FY 2014			FY 2015			FY 2016		
	Non-TRB	TRB	Total	Non-TRB	TRB	Total	Non-TRB	TRB	Total
Midwestern State University	\$56,970	\$15,670	\$72,640	\$93,615	\$13,705	\$107,320	\$91,135	\$12,015	\$103,150
Stephen F. Austin State University	99,685	39,135	138,820	94,870	36,230	131,100	101,518	33,360	134,878
Texas Southern University	78,233	68,635	146,868	96,658	62,545	159,203	114,930	56,200	171,130
Texas State Technical College System	53,076	7,055	60,131	52,414	6,345	58,759	50,110	43,125	93,235
Texas State University System	661,365	146,430	807,795	720,292	125,818	846,110	692,706	111,317	804,023
Texas Tech University System	409,815	165,326	575,142	461,854	156,914	618,768	460,976	141,603	602,579
Texas Woman's University	41,346	32,300	73,646	39,194	29,615	68,809	55,996	26,830	82,826
The Texas A&M University System	1,568,150	438,620	2,006,770	1,776,233	397,575	2,173,808	2,072,012	354,170	2,426,182
The University of Texas System	5,006,390	954,370	5,960,760	5,188,947	871,165	6,060,112	5,622,360	1,239,445	6,861,805
University of Houston System	766,786	159,520	926,306	758,596	143,430	902,026	811,501	243,891	1,055,392
University of North Texas System	350,272	132,710	482,982	405,937	120,530	526,467	427,385	108,070	535,455
Total Revenue Debt Outstanding	\$9,092,088	\$2,159,772	\$11,251,859	\$9,688,612	\$1,963,871	\$11,652,483	\$10,500,629	\$2,370,026	\$12,870,655
* TRB - Tuition Revenue Bond									
Notes:									
The debt outstanding figures include the accretion on capital appreciation bonds as of August 31, 2016.									
All college and university revenue bonds are equally secured by and payable from a pledge of all or a portion of certain "revenue funds" as defined in Chapter 55, Texas Education Code, as amended, of the applicable system or institution of higher education. Historically, however, the state has appropriated funds to the schools in an amount equal to all or a portion of the debt service on revenue bonds issued pursuant to certain specific authorizations to individual institutions in Chapter 55, Texas Education Code ("Tuition Revenue Bonds").									
Amounts do not include premium on capital appreciation bonds.									
Includes commercial paper notes outstanding.									
Excludes HEAF and PUF debt.									
Source: Texas Bond Review Board - Bond Finance Office.									

but unissued revenue debt was self-supporting and decreased from \$2.93 billion to \$2.83 billion.

Debt Authority – 84th Texas Legislature

In the General Appropriations Act, the 84th Legislature authorized the issuance of \$767.7 million of revenue bonds and appropriated those bond proceeds in the General Appropriations Act to the Texas Facilities Commission for the North Austin and Capitol Complex projects. The bonds are anticipated to be repaid with lease payments from state agencies and are subject to biennial appropriation by the Legislature of funds available for payment. Lease payments were appropriated to the Texas Facilities Commission for the 2016-2017 biennium.

The Legislature also authorized \$3.10 billion in TRB debt with the passing of HB 100. Historically, the legislature has appropriated funds in an amount equal to all or a portion of the debt service on tuition revenue debt issued. As of August 31, 2016 remaining authorized but unissued TRB debt totaled \$2.31 billion. (See *Table 2.5A* for authorized but unissued amounts by university system.)

Additionally, the 84th Legislature passed HB 122 which limits the issuance of debt secured by the Texas Mobility Fund solely to refundings or issuances that replace variable-rate debt.

Table 2.5A TEXAS COLLEGE AND UNIVERSITY AUTHORIZED BUT UNISSUED TUITION REVENUE DEBT as of August 31, 2016 (amounts in thousands)	
Midwestern State University	\$ 58,400
Stephen F. Austin State University	46,400
Texas Southern University	-
Texas State Technical College System	-
Texas State University System	256,420
Texas Tech University System	247,115
Texas Woman's University	37,997
The Texas A&M University System	800,792
The University of Texas System	352,832
University of Houston System	245,456
University of North Texas System	269,000
Total	\$ 2,314,412
Source: Texas Bond Review Board	

Debt Authority – 83rd Texas Legislature

The 83rd Legislature authorized up to \$2.0 billion to be withdrawn from the Economic Stabilization Fund (ESF) to be used only in support of projects for the State Water Plan. While this created no new debt authority, the

Table 2.6

DEBT-SERVICE REQUIREMENTS OF TEXAS COLLEGE AND UNIVERSITY REVENUE DEBT BY FISCAL YEAR

(amounts in thousands)

College and University Revenue Debt	2017	2018	2019	2020	2021	2022 & Beyond
The University of Texas System - Non-TRB	\$466,796	\$466,114	\$457,297	\$432,876	\$428,903	\$6,932,720
The University of Texas System - TRB	174,272	173,997	173,966	174,012	172,764	712,038
The University of Texas System - TOTAL*	\$641,068	\$640,111	\$631,262	\$606,888	\$601,667	\$7,644,758
The Texas A&M University System - Non-TRB	\$168,805	\$169,381	\$167,124	\$166,076	\$163,308	\$2,355,777
The Texas A&M University System - TRB	51,793	41,997	42,011	40,913	40,922	236,321
The Texas A&M University System - TOTAL	\$220,599	\$211,378	\$209,135	\$206,989	\$204,230	\$2,592,098
Texas Tech University System - Non-TRB	\$43,164	\$43,409	\$42,860	\$43,066	\$40,326	\$445,341
Texas Tech University System - TRB	21,072	22,057	20,401	19,839	19,805	66,487
Texas Tech University System - TOTAL	\$64,236	\$65,465	\$63,261	\$62,904	\$60,131	\$511,829
Texas State University System - Non-TRB	\$62,249	\$62,268	\$62,505	\$62,513	\$60,687	\$737,925
Texas State University System - TRB	20,710	19,983	15,821	15,827	15,695	51,135
Texas State University System - TOTAL	\$82,959	\$82,251	\$78,326	\$78,340	\$76,381	\$789,060
University of Houston System - Non-TRB	\$75,918	\$75,898	\$73,532	\$73,450	\$73,381	\$857,901
University of Houston System - TRB	30,143	26,918	26,272	23,895	23,933	188,308
University of Houston System - TOTAL*	\$106,061	\$102,816	\$99,804	\$97,345	\$97,315	\$1,046,209
The University of North Texas System - Non-TRB	\$36,932	\$36,933	\$36,350	\$36,649	\$36,652	\$494,994
The University of North Texas System - TRB	17,508	15,240	15,236	12,585	12,585	64,659
The University of North Texas System - TOTAL	\$54,440	\$52,174	\$51,587	\$49,234	\$49,236	\$559,653
Texas Woman's University - Non-TRB	\$5,046	\$5,189	\$4,901	\$4,895	\$4,893	\$52,272
Texas Woman's University - TRB	4,179	4,177	4,176	3,511	3,502	14,680
Texas Woman's University - TOTAL	\$9,225	\$9,366	\$9,077	\$8,407	\$8,395	\$66,953
Texas State Technical College System - Non-TRB	\$4,847	\$4,893	\$4,827	\$4,772	\$4,524	\$47,501
Texas State Technical College System - TRB	4,273	3,765	3,744	3,759	3,757	41,992
Texas State Technical College System - TOTAL	\$9,119	\$8,658	\$8,571	\$8,531	\$8,281	\$89,493
Stephen F. Austin State University - Non-TRB	\$11,121	\$11,140	\$11,164	\$11,187	\$10,603	\$65,891
Stephen F. Austin State University - TRB	4,305	3,856	3,852	3,841	3,836	22,654
Stephen F. Austin State University - TOTAL	\$15,426	\$14,997	\$15,016	\$15,028	\$14,439	\$88,545
Midwestern State University - Non-TRB	\$6,512	\$6,551	\$6,590	\$6,628	\$6,659	\$115,669
Midwestern State University - TRB	2,127	2,130	2,130	1,444	1,353	5,244
Midwestern State University - TOTAL	\$8,640	\$8,681	\$8,720	\$8,072	\$8,012	\$120,912
Texas Southern University - Non-TRB	\$9,473	\$9,474	\$7,964	\$7,964	\$7,963	\$98,330
Texas Southern University - TRB	9,194	8,386	8,378	8,378	8,380	31,910
Texas Southern University - TOTAL	\$18,666	\$17,860	\$16,342	\$16,342	\$16,342	\$130,241
Total College and University Revenue Debt	\$1,230,440	\$1,213,756	\$1,191,101	\$1,158,081	\$1,144,430	\$13,639,750

*Excludes Build America Bond subsidy payments.

Legend: TRB = Tuition Revenue Bonds

Notes: All college and university revenue bonds are equally secured by and payable from a pledge of all or a portion of certain "revenue funds" as defined in Chapter 55, Texas Education Code, as amended, of the applicable system or institution of higher education. Historically, however, the state has appropriated funds to the schools in an amount equal to all or a portion of the debt service on revenue bonds issued pursuant to certain specific authorizations to individual institutions in Chapter 55, Texas Education Code ("Tuition Revenue Bonds"). The table includes commercial paper, but excludes HEAF and PUF debt.

Source: Texas Bond Review Board - Bond Finance Office

Table 2.7 TEXAS DEBT AUTHORIZED BUT UNISSUED (amounts in thousands)					
	8/31/2012	8/31/2013	8/31/2014	8/31/2015	8/31/2016
General Obligation Debt					
Self-Supporting					
Veterans' Land and Housing Bonds	\$1,873,372	\$1,606,274	\$1,551,634	\$1,317,891	\$1,208,929
Water Development Bonds	6,499,820	6,258,633	6,360,469	6,279,132	5,998,014
Farm and Ranch Loan Bonds ¹	300,000	300,000	300,000	300,000	300,000
College Student Loan Bonds	1,310,390	1,383,565	1,322,540	1,308,525	1,214,895
Texas Agricultural Finance Authority Bonds	221,000	221,000	221,000	223,250	224,750
Texas Public Finance Authority - TMVRLF	200,405	200,405	200,405	200,405	200,405
Texas Mobility Fund Bonds	*	*	*	*	*
Texas Rail Relocation and Improvement Fund	*	*	*	*	*
Total Self-Supporting	\$10,404,987	\$9,969,877	\$9,956,048	\$9,629,203	\$9,146,993
Not Self-Supporting ²					
Agricultural Water Conservation Bonds	\$164,840	\$164,840	\$164,840	\$164,840	\$164,840
Higher Education Constitutional Bonds	***	***	***	***	***
Texas Public Finance Authority ³	3,084,517	2,954,697	2,669,547	2,370,637	2,037,487
Transportation Commission GO Transportation Bonds	4,000,709	2,901,360	2,901,360	1,442,008	697,008
Water Development Bonds - EDAP ⁴	186,036	151,976	151,976	101,748	53,492
Water Development Bonds - State Participation	0	0	0	0	0
Water Development Bonds - WIF ⁵	152,134	101,836	0	0	0
Total Not Self-Supporting	\$7,588,236	\$6,274,709	\$5,887,723	\$4,079,233	\$2,952,827
Total General Obligation Debt	\$17,993,223	\$16,244,586	\$15,843,771	\$13,708,436	\$12,099,820
Non-General Obligation Debt					
Self-Supporting					
Permanent University Fund Bonds ⁵					
The Texas A&M University System	\$449,640	\$546,300	\$567,111	\$524,165	\$548,407
The University of Texas System	606,841	691,660	794,612	785,535	659,009
College and University Revenue Bonds	**	**	**	**	**
Texas Turnpike Authority Bonds	**	**	**	**	**
Texas Water Resources Finance Authority Bonds	**	**	**	**	**
Texas Water Development Bonds (Water Resources Fund)	**	**	**	**	**
Texas Workers' Compensation Fund Bonds	**	**	**	**	**
Texas Workforce Commission Unemp Comp Bonds	***	***	***	***	***
Nursing Home Liability Insurance	75,000	75,000	75,000	75,000	75,000
FAIR Plan	75,000	75,000	75,000	75,000	75,000
Veterans' Financial Assistance Bonds	771,440	771,440	771,440	771,440	771,440
State Highway Fund Revenue Bonds	1,400,667	1,400,667	700,149	700,149	700,149
Water Development Board - State Revolving Fund	**	**	**	**	**
Total Self-Supporting	\$3,378,588	\$3,560,067	\$2,983,312	\$2,931,289	\$2,829,005
Not Self-Supporting ²					
Texas Public Finance Authority Bonds	\$120,881	\$120,881	\$120,881	\$888,551	\$888,551
TPFA Master Lease Purchase Program	73,210	85,033	87,888	106,981	105,520
Texas Military Facilities Commission Bonds	**	**	**	**	**
Total Not Self-Supporting	\$194,091	\$205,914	\$208,769	\$995,532	\$994,071
Conduit					
Texas Windstorm Insurance Association	***	***	***	***	***
Texas Small Business I.D.C. Bonds	**	**	**	**	**
Texas Department of Housing & Community Affairs	**	**	**	**	**
Texas State Affordable Housing Corporation	**	**	**	**	**
Total, Conduit	\$0	\$0	\$0	\$0	\$0
Total Non-General Obligation Debt	\$3,572,679	\$3,765,981	\$3,192,081	\$3,926,821	\$3,823,076
Total Debt	\$21,565,902	\$20,010,567	\$19,035,852	\$17,635,257	\$15,922,896
<p>* No bond issuance limit, but debt service on all bonds issued and proposed to be issued pursuant to the Article III, Section 49-k and 49-o of the Texas Constitution can not be greater than the Comptroller's certified projection that the amount of money dedicated to the fund is equal to at least 110 percent of the debt-service requirements for as long as the obligations are outstanding.</p> <p>** No issuance limit has been set by the Texas Constitution. Bonds may be issued by the agency without further authorization by the Legislature. However, university bonds rated lower than AA- or its equivalent may not be issued without the approval of the Bond Review Board. All bonds must be approved by the Attorney General.</p> <p>*** No bond issuance limit, but HECB debt service may not exceed \$131.25 million per year; TWIA has an annual limit of \$500 Million in "Class 1," \$250 Million of "Class 2," and \$250 million of "Class 3" public securities; and TWC may not exceed \$2 billion per issuance.</p> <p>¹ Effective in November 1995, state voters authorized the use of \$200 million of the existing \$500 million Farm and Ranch Program authority for the purposes of the Texas Agricultural Finance Authority (TAFA). Of the \$200 million, the Bond Review Board has approved an initial amount of \$25 million for the Texas Agricultural Fund Program of TAFA.</p> <p>² Bonds that are not self-supporting depend solely on the state's general revenue for debt service.</p> <p>³ Includes \$3 billion for cancer prevention that was authorized by voters in November 2007 of which \$1.93 billion remains unissued.</p> <p>⁴ Economically Distressed Areas Program (EDAP) bonds do not depend totally on the state's general revenue fund for debt service.</p> <p>⁵ Issuance of PUF bonds by A&M is limited to 10 percent, and issuance by UT is limited to 20 percent of the cost value of investments and other assets of the PUF, except real estate. The PUF value used is as of August 31, 2016.</p> <p>Source: Texas Bond Review Board - Bond Finance Office</p>					

money may be used for low-interest loans, credit enhancement agreements, deferral of interest obligations, and funding for government entities that develop and manage water supplies under specific Texas Water Development Board debt programs. Voters approved the proposed amendments to the Texas Constitution at the November 5, 2013 bond election.

Debt Authority – 83rd Texas Legislature, Special Session

SJR 1 of the 3rd Called Special Session proposed a constitutional amendment diverting half of the oil and gas tax revenues to be deposited into the ESF to the State Highway Fund to provide transportation funding for repairs and maintenance of public roads. Voters approved the proposed amendment to the Texas Constitution at the November 4, 2014 general election.

Debt Authority – 82nd Texas Legislature

The 82nd Legislature appropriated \$256.5 million for Transportation Proposition 12 debt service and \$78.1 million for CPRIT debt service. Additionally, voters approved two constitutional amendments in the November 2011 election that provide the TWDB and THECB with evergreen bonding authority of \$6.00 billion and \$1.86 billion, respectively.

Debt Authority – 81st Texas Legislature, Regular Session

The 81st Legislature authorized up to \$4.00 billion in evergreen GO authority for Veterans' Land and Housing Bonds that was approved by voters in 2009. The 81st Legislature authorized up to \$707.0 million of Water Development Board debt to be issued as not self-supporting GO debt.

Debt Authority – 81st Texas Legislature, Special Session

The 81st Legislature's First Called Special Session authorized no additional GO debt, but appropriated \$100.0 million for debt service during the 2010-2011 biennium for the

issuance of \$2.00 billion of Texas Transportation Commission general obligation bonds that had been approved by voters as Proposition 12 in 2007. As of August 31, 2012 Texas colleges and universities had no significant remaining authorized but unissued Tuition Revenue Bond authority.

Long-Term Contracts and Lease Purchases

Long-term contracts and lease or installment-purchase agreements can serve as cost-effective financing alternatives to the issuance of bonds. Like bonds, these agreements are a method of financing capital purchases over time, and payments on these contracts and agreements are generally subject to biennial legislative appropriations.

The equipment lease purchases approved by the Bond Review Board are typically financed through the Texas Public Finance Authority's Master Lease Purchase Program and are included in the state's total debt outstanding. Certain other lease purchase debt is not reported to the Bond Review Board.

Texas Swaps Outstanding

At the end of fiscal 2016, three state issuers had swap agreements in place: the Veterans Land Board (VLB), The University of Texas System (UTS), and the Texas Department of Housing and Community Affairs (TDHCA). Each entered the swap market in 1994, 1999, and 2004, respectively. As of August 31, 2016 the aggregate notional amount of swaps outstanding at the state level was \$4.51 billion. Interest rate swaps are primarily used as financial-management tools to reduce interest expense and hedge against interest rate, tax, basis and other risks. (See *Appendix C* for a background discussion of swaps and related data.)

State issuers are authorized to enter into swap agreements under the Texas Government Code, Section 1371 which grants special authority to enter into credit agreements.

However, TDHCA and VLB have broad authority to enter into swaps under Section 2306.351 of the Texas Government Code and Sections 161.074, 162.052 and 164.010 of the Texas Natural Resources Code, respectively.

At the end of fiscal 2016, VLB was a party to 53 pay-fixed, receive-variable rate (synthetic fixed-rate) swaps associated with its variable-rate demand bond issues. The total notional amount for these swaps was \$2.34 billion at fiscal year-end 2016. UTS had six Revenue Financing System swap agreements and two Permanent University Fund swap agreements totaling \$1.21 billion in notional amount. TDHCA had four such swaps on single-family bonds totaling \$128.8 million in notional amount.

Additionally, at the end of fiscal 2016 VLB had two outstanding basis rate (pay-variable, receive-variable) swaps with \$61.2 million in notional amount that were associated with variable-rate demand debt issues. UTS had three Revenue Financing System and two PUF basis rate agreements totaling \$768.7 million in notional amount.

The Net Fair Values for the swap agreements in place at the end of fiscal 2016 for the three state issuers were as follows: VLB, negative \$348.2 million; UTS, negative \$384.7 million; and TDHCA, negative \$17.3 million. A negative fair value on a swap agreement indicates that the state issuer would owe its counterparty the amount indicated if the swaps were terminated. (See *Tables C1 and C2 in Appendix C* for details regarding Texas' interest rate swaps outstanding and fair value data at August 31, 2016.) The three state issuers each have the unilateral option to terminate their swap agreements.

See *Table C3 and Table C4 in Appendix C* for debt-service requirements of variable-rate debt outstanding and net interest rate swap payments. At fiscal year-end 2016, estimated debt-service requirements and net swap

payments for VLB's pay-fixed, receive-variable swaps totaled \$3.06 billion; and that of UTS totaled \$1.82 billion. TDHCA had only synthetic fixed-rate swaps outstanding, the estimated debt-service requirements and net swap payments for which totaled \$212.5 million. UTS had five basis swaps outstanding, the estimated debt-service requirements and net swap payments for which totaled \$914.2 million. VLB had two basis swaps outstanding, the estimated debt-service requirements and net swap payments for which totaled \$32.3 million.

Chapter 3

State Bond Issuance Costs

Excluding issuances of conduit and private placement debt, during fiscal 2016 the weighted average of issuance costs for state bond issuers was \$5.20 per \$1,000 compared to \$5.40 per \$1,000 for fiscal 2015. The issuances ranged in size from \$19.2 million to \$911.36 million. Appendix A of this report details the issuance costs associated with each of these issues as well as the conduit and private placement issues.

Issuance Costs for Texas Bond Issuers

In fiscal 2016 the average issue size for Texas' state issuers decreased to \$212.6 million from \$313.8 million in fiscal 2015 (Table 3.1). Excluding conduit and private placement issues, 23 (74.2%) of the 31 transactions completed in fiscal 2016 were \$100.0 million or greater in size compared to 19 (70.4%) of the 27 transactions completed in fiscal 2015.

Underwriters' spreads began to increase after the financial downturn in fiscal 2008 due to higher underwriting risk in the municipal bond market and higher issuance costs associated with the introduction of Build America Bonds

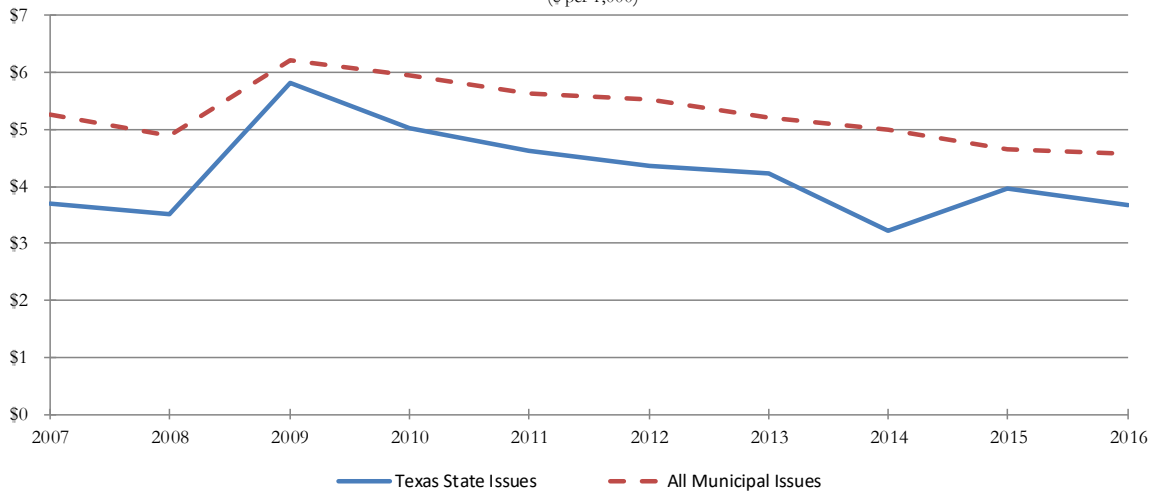
(BABs). The BABs program expired on December 31, 2010. Since 2009 underwriting spreads have declined to levels seen prior to the financial downturn.

In fiscal 2016 the weighted average underwriting spread accounted for 70.4 percent of all issuance costs. As a result of decreases in takedown and other underwriter's spread costs in fiscal 2016, the weighted average underwriting spread per issue decreased to \$3.66 from \$3.96 in fiscal 2015 (Figure 3.1). (See *Comparison of Issuance Costs by Transaction Size* below).

During fiscal 2016 fees per bond increased compared to fiscal 2015 due to the decrease in average issue size. Other Issuance Costs (bond counsel, financial advisor, rating agency, printing and other costs) per \$1,000 increased to an average of \$1.54 per \$1,000 per issue (\$326,511) compared to \$1.44 per \$1,000 (\$451,652) in fiscal 2015.

Table 3.1 WEIGHTED AVERAGE ISSUANCE COSTS FOR TEXAS BOND ISSUES (Excludes Private Placement, Conduits and Remarketings)						
	Fiscal 2015			Fiscal 2016		
	Count	Average Cost Per Bond Issue	Average Cost Per \$1,000 of Bonds Issued	Count	Average Cost Per Bond Issue	Average Cost Per \$1,000 of Bonds Issued
Average Issue Size (In Millions)	27	\$313.8		31	\$212.6	
Costs of Issuance:						
Underwriter's Spread:						
Takedown	26	\$1,175,218	\$3.66	29	\$730,161	\$3.42
Spread Expenses	26	84,101	0.26	31	68,524	0.32
Underwriter's Counsel	21	56,631	0.15	27	34,317	0.15
Other Underwriter's Spread Costs*	6	131,116	1.25	7	121,763	1.01
Underwriter's Spread Subtotal	27	\$1,242,449	\$3.96	31	\$779,073	\$3.66
Other Issuance Costs:						
Bond Counsel	27	\$133,687	\$0.43	31	\$81,249	\$0.38
Financial Advisor	24	78,934	0.24	25	95,315	0.43
Printing	27	2,406	0.01	31	2,563	0.01
Other	27	110,987	0.35	31	64,798	0.30
Other Issuance Costs Subtotal	27	\$317,244	\$1.01	31	\$225,476	\$1.06
Rating Agencies:						
Moody's	27	\$59,420	\$0.19	30	\$46,283	\$0.24
Standard & Poor's	21	54,645	0.15	25	41,184	0.17
Fitch	15	58,474	0.14	14	51,001	0.18
Rating Agency Costs Subtotal	27	\$134,408	\$0.43	31	\$101,035	\$0.48
Total	27	\$1,694,101	\$5.40	27	\$1,105,585	\$5.20
Note: Figures exclude bond insurance premiums.						
* Management Fee, Structuring Fee or Underwriter's Risk.						
Source: Texas Bond Review Board						

Figure 3.1
GROSS UNDERWRITING SPREADS: 2007 - 2016
TEXAS STATE BOND ISSUES vs. ALL MUNICIPAL BOND ISSUES
 (\$ per 1,000)



Note: 2016 Municipal figures are through July 21, 2016. Amounts represent dollars per \$1,000 face value of bond issues. Gross spreads include managers' fees, underwriting fees, average takedowns, and expenses. Private placements, conduits, short-term notes maturing in 12 months or less, and remarketings of variable-rate securities are excluded.

Sources: *The Bond Buyer* (08/16); Thomson Financial Securities; and Texas Bond Review Board - Bond Finance Office.

Underwriting Costs for Texas Bond Issuers Compared to National Costs

Excluding conduit and private placement issuances, during fiscal 2016 Texas' state bond issuers paid lower average underwriting fees compared to the national averages (*Figure 3.1*). This difference is primarily due to the generally higher credit quality of Texas issuers and the market's receptivity to Texas issues. Statistics published by Thomson Financial Securities Data show that underwriting spreads nationally averaged \$4.56 per \$1,000 compared to Texas' average of \$3.66 per \$1,000.

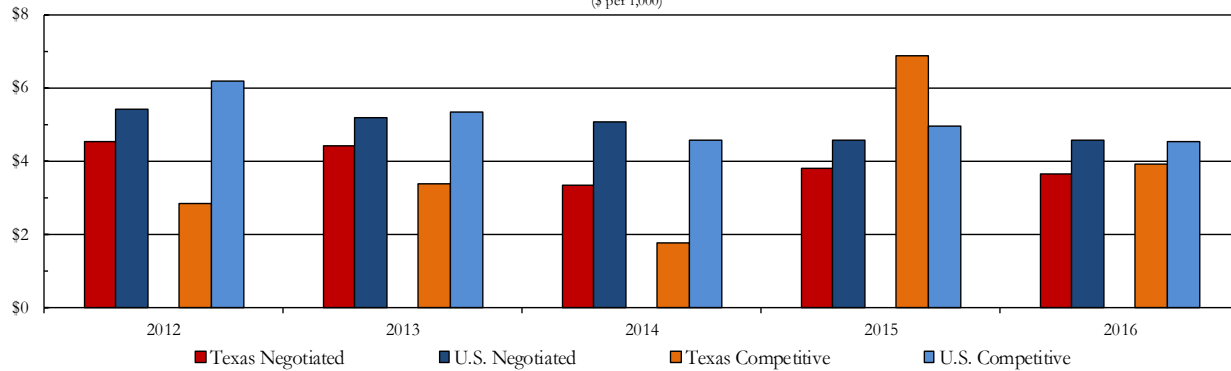
During fiscal 2016 Texas issuers saw lower weighted average underwriting costs in negotiated and competitive transactions when compared to the national averages as reported by Thomson Financial Securities (*Figure 3.2*). Texas' average of \$3.65 per \$1,000 for negotiated sales and \$3.92 per \$1,000 for competitively bid sales were 20.0 and 13.7 percent lower than the national averages, respectively.

Comparison of Issuance Costs by Transaction Size

Larger bond issues usually have a lower cost per \$1000 because certain fixed costs of issuance, including some legal and financial advisory services and document drafting fees, do not vary proportionately with the size of the bond issue.

Texas' issuance costs decreased in fiscal 2016 and were generally lower than those experienced during fiscal 2012-2015 (*Figure 3.3*). Appendix A details the issuance costs for each transaction in fiscal 2016.

Figure 3.2
GROSS UNDERWRITING SPREADS: 2012 - 2016
NEGOTIATED vs. COMPETITIVE MUNICIPAL ISSUES
(Excludes Private Placements, Conduits and Remarketings; weighted averages)
(\$ per 1,000)



Note: 2016 U.S. figures are through July 21, 2016. Amounts represent dollars per \$1,000 face value of bond issues. Gross spreads include manager's fees, underwriting fees, average takedowns, and expenses. Private placements, short-term notes maturing in 12 months or less, and remarketings of variable-rate securities are excluded.
Sources: *The Bond Buyer* (08/16); Thomson Financial Securities; and Texas Bond Review Board - Bond Finance Office.

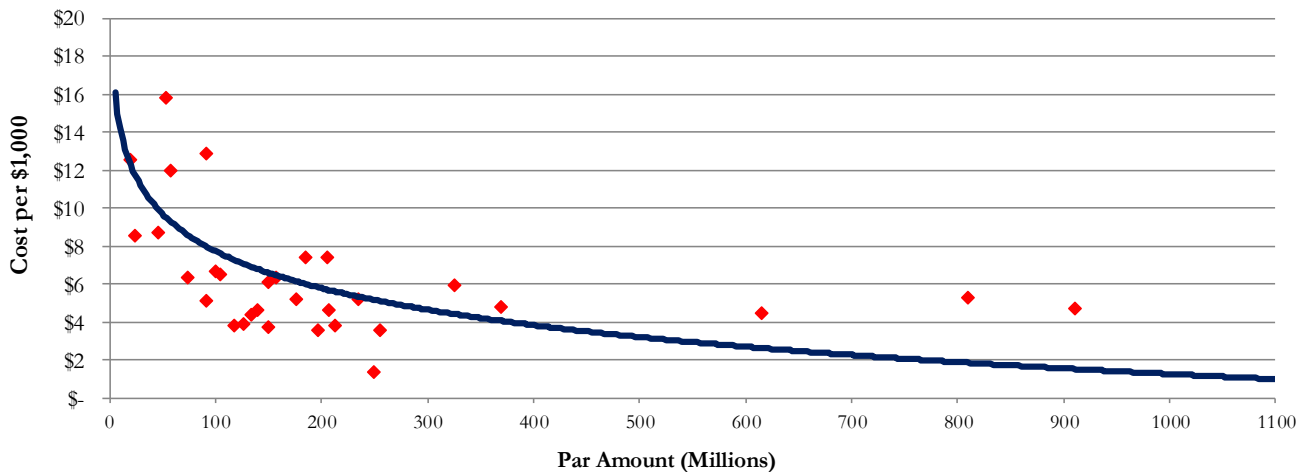
Trends in State Bond Issuance Costs in 2016

The characteristics of 31 non-conduit bond transactions were reviewed to determine trends in issuance costs during fiscal 2016. Of those, 27 were negotiated sales and four were competitive sales. Of the 27 negotiated sales, seven were less than \$100 million in size, nine were from \$101-\$200 million, six were from \$201-\$300 million, two were from \$301-\$400

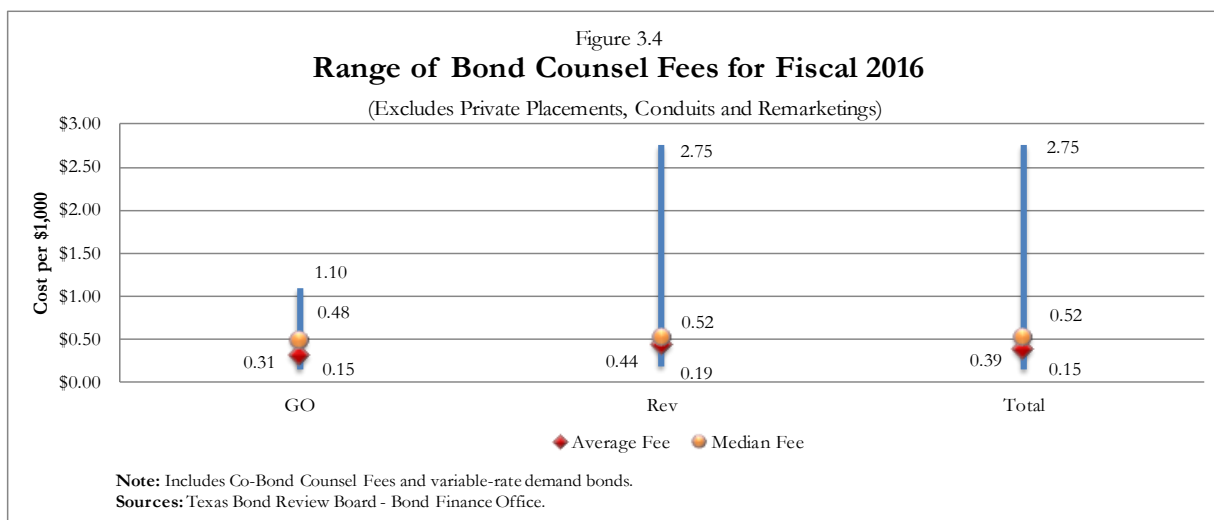
million and three were from \$600.0 million and above. The four competitive transactions were for \$23.7 million, \$100.7 million, \$150.0 million, and \$184.4 million, respectively.

As in the past, the cost per \$1,000 in fiscal 2016 generally decreased as transaction size increased (*Figure 3.3*).

Figure 3.3
COSTS OF ISSUANCE: FY 2012-2016
(Excludes Private Placements, Conduits and Remarketings)



Note: Includes variable-rate demand bonds.
Source: Texas Bond Review Board - Bond Finance Office



Issuance Costs for State General Obligation and Revenue Bonds in 2016

Four component fees comprise most of the costs of issuing bonds: bond counsel, financial advisor, underwriters' spread and credit rating agencies. To analyze these fees on a cost per \$1,000 basis for state general obligation and revenue issues, data from fiscal year 2016 is shown graphically in the figures that follow (*Figures 3.4, 3.5, 3.6 and 3.7*). Each cost of issuance component has been compared by bond type (general obligation vs. revenue) and by total bonds issued.

Cost of issuance data was obtained from nine GO transactions and 18 revenue transactions

representing five state agencies and five institutions of higher education.

Figure 3.4 shows the bond counsel cost per \$1,000 for bonds issued during 2016. The total weighted average cost for bond counsel fees was \$0.39 per \$1,000 a decrease of \$0.04 per \$1,000 compared to \$0.43 per \$1,000 for fiscal 2015. General Obligation bonds had lower costs per \$1,000 than revenue bonds with a weighted average cost of \$0.31 per \$1,000 compared to \$0.44 per \$1,000 for revenue bonds. Additionally, the fees for GO bonds had a much smaller variance than the fees for

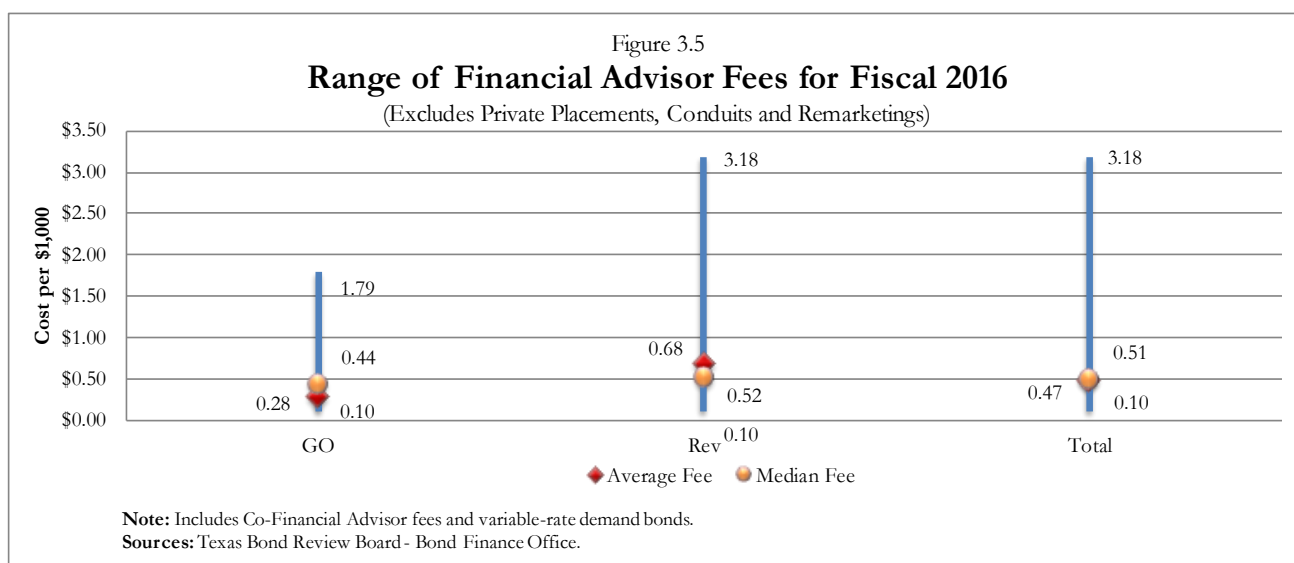
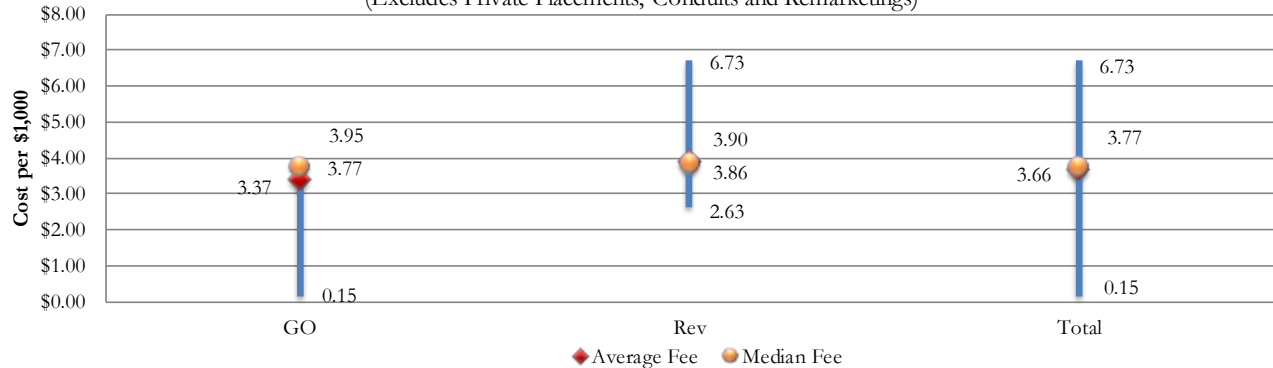


Figure 3.6
Range of Total Underwriter's Spread for Fiscal 2016

(Excludes Private Placements, Conduits and Remarketings)



Note: Includes variable-rate demand bonds. Total Underwriter's Spread includes; Takedown, Spread Expenses, Management & Structuring Fees, Underwriting Risk and Underwriter's Counsel.

Sources: Texas Bond Review Board - Bond Finance Office.

revenue bonds. The fees for GO bonds ranged from \$0.15 to \$1.10 per \$1,000 while the fees for revenue bonds ranged from \$0.19 to \$2.75 per \$1,000.

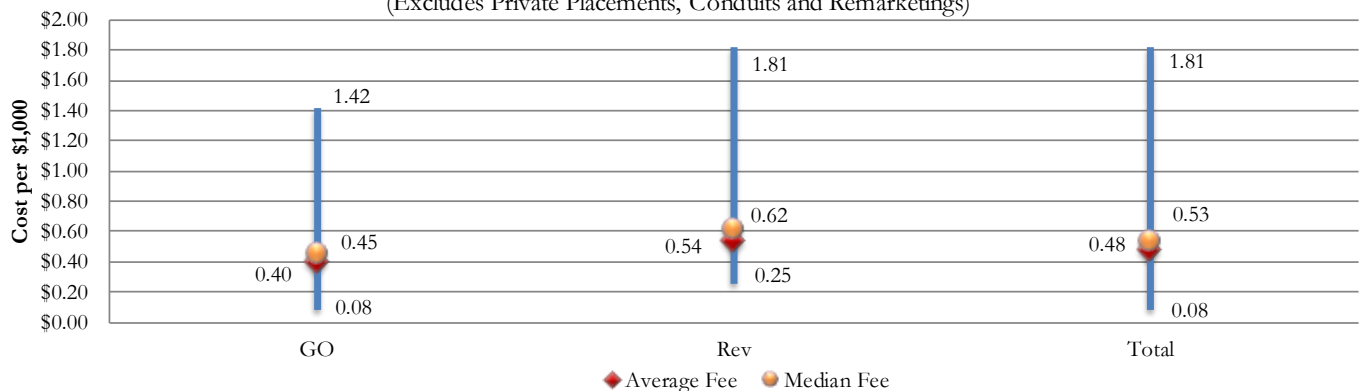
Figure 3.5 shows the cost per \$1,000 for the 25 transactions with a financial advisor fee. The total weighted average cost for financial advisor fees was \$0.47 per \$1,000, an increase of \$0.23 per \$1,000 compared to \$0.24 per \$1,000 for fiscal 2015. General Obligation bonds had a weighted average cost of \$0.28 per \$1,000 compared to \$0.68 per \$1,000 for revenue bonds. The difference in the range of

fees for financial advisor was greater for revenue bonds than GO bonds. GO transactions had a minimum fee of \$0.10 and a maximum fee of \$1.79 per \$1,000 and revenue bonds had a minimum fee of \$0.52 and a maximum fee of \$3.18 per \$1,000.

Figure 3.6 shows the total underwriters' spread for all transactions and includes the following: management and structuring fees, underwriting risk, spread expenses and underwriter's counsel. The total weighted average cost was \$3.66 per \$1,000, a decrease of \$0.30 per \$1,000 compared to \$3.96 per

Figure 3.7
Range of Total Ratings Fees for Fiscal 2016

(Excludes Private Placements, Conduits and Remarketings)



Note: Includes variable-rate demand bonds. Total ratings fee may include ratings fees from Moody's, S&P and Fitch.

Sources: Texas Bond Review Board - Bond Finance Office.

\$1,000 for fiscal 2015. GO bonds had an average weighted cost of \$3.37 and revenue bonds had an average weighted cost of \$3.90 per \$1,000. The fees for GO bonds had a narrow range from a minimum fee of \$0.15 to a maximum fee of \$3.95 per \$1,000. Revenue bonds ranged from \$2.63 to \$6.73 per \$1,000.

Figure 3.7 shows the cost per \$1,000 for ratings agency fees. The total weighted average cost was \$0.48 per \$1,000, an increase of \$.05 per \$1,000 compared to \$0.43 per \$1,000 in fiscal 2015. The average weighted cost for GO bonds was below the total average cost at \$0.40 per \$1,000 while the average weighted cost for revenue bonds was higher at \$0.54 per \$1,000.

Chapter 4

Texas Private Activity Bond Allocation Program and Other Bonding Authority

Texas again experienced an increase in volume cap for the Program Year 2016 Private Activity Bond (PAB) Allocation Program. The 2016 volume cap was set at \$2,746,911,400, an increase of \$51.2 million (1.9 percent) over the calendar 2015 cap. The total size of the PAB program including 2016 volume cap and carryforward, was \$6.56 billion, a 1.5 percent increase from the 2015 total. As of November 15, 2016, \$850.6 million had been allocated and application requests totaled \$3.40 billion, a decrease of 22.2 percent from Program Year 2015.

As of December 1, 2016 Texas had \$209.2 million in unused Qualified Energy Conservation Bond authority.

Volume Cap

Texas is second only to California in population and resulting volume cap. Texas experienced an increase in volume cap for the 2016 PAB Allocation Program. Based on its population, the 2016 volume cap was set at \$2,746,911,400, an increase of \$51.2 million (1.5 percent) over the calendar 2015 cap of \$2,695,695,800.

The volume cap increase can be attributed not only to the growth of the state's population, but also to federal legislation that increased the per-capita formula. On December 20, 2000 federal legislation was passed that accelerated the increase in private-activity volume cap, the first such increase since the Tax Reform Act of 1986. The cap phase-in began January 1, 2001 when the limit was increased from \$50 per capita to \$62.50 per capita. The second part of the plan occurred in January 2002 when the cap multiplier increased to \$75 per capita or \$225 million, whichever is greater. The multiplier was indexed to inflation beginning in 2003 resulting in increases in 2007, 2008, 2009, 2011 and 2014 to the current level of \$100 per capita.

Including 2016 volume cap and carryforward, for Program Year 2016 the state had a total of \$6.56 billion of volume cap available among the six subceilings of which \$850.6 million (13.0%) had been allocated as of November 15, 2016 (*Table 4.1*).

Total bonding authority demand decreased slightly during the 2016 Program Year compared to the 2015 Program Year. While 20.7 percent of the available 2016 volume cap

Table 4.1
STATE OF TEXAS
PRIVATE ACTIVITY BOND ALLOCATION PROGRAM
2016 AVAILABLE VOLUME CAP vs. ALLOCATION AMOUNTS
(as of November 15, 2016)

SUBCEILING	AVAILABLE* VOLUME CAP	PERCENT OF TOTAL	ISSUED ISSUED 2016 ALLOCATION	ISSUED CARRYFORWARD ALLOCATION	ISSUED PERCENT OF TOTAL
Single Family Housing	\$ 2,227,753,792	34.0%	\$ 60,068,280	\$ 81,510,000	2.2%
State-Voted Issues	400,249,941	6.1%	-	-	0.0%
Small Issue IDBs	54,938,228	0.8%	10,000,000	-	0.2%
Multifamily Housing	1,725,808,509	26.3%	99,470,000	346,673,500	6.8%
Student Loan Bonds	288,425,697	4.4%	-	-	0.0%
All Other Issues	1,864,238,862	28.4%	-	252,885,000	3.9%
TOTAL	\$ 6,561,415,029	100.0%	\$ 169,538,280	\$ 681,068,500	13.0%

*Includes carryforward amounts. Carryforward is reserved volume cap from the prior 3 years.

Source: Texas Bond Review Board - Private Activity Bond Program.

<p>Table 4.2</p> <p>STATE OF TEXAS</p> <p>PRIVATE ACTIVITY BOND ALLOCATION PROGRAM</p> <p>2016 REQUESTED VOLUME CAP</p>			
SUBCEILINGS	AVAILABLE ALLOCATION*	REQUESTED ALLOCATION*	REQUESTS AS A % OF AVAILABILITY
Mortgage Revenue Bonds	\$ 2,227,753,792	\$ 1,213,005,252	54.4%
State-Voted Issue Bonds	400,249,941	180,000,000	45.0%
Industrial Development Bonds	54,938,228	40,000,000	72.8%
Multifamily Rental Project Bonds	1,725,808,509	1,538,800,000	89.2%
Student Loan Bonds	288,425,697	-	0.0%
All Other Bonds Requiring Allocation	1,864,238,862	431,885,000	23.2%
TOTALS	\$ 6,561,415,029	\$ 3,403,690,252	51.9%
<p>*Includes carryforward amounts. Carryforward is reserved volume cap from the prior 3 years.</p> <p>Source: Texas Bond Review Board - Private Activity Bond Program.</p>			

had been requested before the August 15th collapse compared to 15.4 percent for 2015, as of November 15th 51.9 percent had been requested in 2016 compared to 67.7 percent in 2015.

Additionally, after the 2015 collapse, the Bond Review Board (BRB) received \$3.38 billion in requests; after the collapse in 2016, the BRB received \$2.05 billion in requests. Applications received for Program Year 2016, including carryforward requests, totaled \$3.40 billion or 51.9 percent of the total available allocation of \$6.56 billion (*Table 4.2*), a decrease of 22.2 percent from the \$4.37 billion of the available allocation requested in 2015.

Current Allocation Trends

Excluding carryforward, as of November 15, 2016 \$169.5 million of Program Year 2016 volume cap had been allocated. As of the same date in Program Years 2013, 2014 and 2015, \$439.3 million (17.7 percent), \$240.1 million (9.1 percent) and \$84.9 million (3.1 percent), respectively, of volume cap (excluding carryforward) had been allocated. Until 2016, as a result of turmoil in the bond market that began in the summer of 2008 and record low interest rates, overall applications received had decreased.

As many of the 2016 applications were for residential rental transactions and the amounts requested are limited by statute and scope, the number of applications increased for 2016 but the amount of volume cap requested decreased (*Table 4.3*). Many issuers have been waiting for the spread between tax-exempt rates and taxable rates to widen before seeking volume cap, or they applied for volume cap with the intention of converting it to carryforward. Larger transactions provide economies of scale that may still take advantage of tax-exempt rates. Although market conditions negatively affected every subceiling, student loan transactions (Subceiling #5) continued to suffer the greatest adverse impact as the trend established in the past five years continued, and they received no 2016 volume cap allocation.

As of November 15, 2016 no mortgage revenue bonds (MRBs) had closed utilizing Program Year 2016 volume cap; however, issuers had converted \$60.1 million of Program Year 2016 volume cap to mortgage credit certificate (MCC) programs. Using carryforward volume cap, seven issuers used approximately \$81.5 million to close MCC programs. Multifamily issuers closed 19 projects as of November 15, 2016 using

<p>Table 4.3</p> <p>STATE OF TEXAS</p> <p>PRIVATE ACTIVITY BOND ALLOCATION PROGRAM</p> <p>2011 TO 2016 ISSUED ALLOCATION</p> <p>(as of November 15, 2016)</p>						
YEAR	AVAILABLE ALLOCATION*	REQUESTED ALLOCATION*	ISSUED VOLUME CAP ALLOCATION	ISSUED CARRYFORWARD ALLOCATION	NUMBER OF APPLICATIONS RECEIVED	ISSUED AS A % OF AVAILABILITY
2011	5,689,632,247	2,347,909,307	218,295,000	618,375,135	59	14.7%
2012	5,390,400,333	2,475,311,578	470,691,078	393,270,937	53	16.0%
2013	4,717,858,332	1,940,837,372	439,286,597	372,573,787	56	17.2%
2014	5,276,952,525	2,776,186,213	240,066,000	811,211,000	47	19.9%
2015	6,461,406,313	4,372,398,594	84,850,000	1,071,125,213	71	17.9%
2016	6,561,415,029	3,403,690,252	169,538,280	681,068,500	104	13.0%

*Includes carryforward amounts. Carryforward is reserved volume cap from the prior 3 years.

Source: Texas Bond Review Board - Private Activity Bond Program.

\$320.9 million of carryforward and \$126.7 million of volume cap compared to 12 projects closing in 2015.

At the beginning of Program Year 2016, the carryforward amount of \$3.81 billion was 138.9 percent of the 2016 Program Year volume cap of \$2.75 billion, and many issuers that applied for a reservation were forced to use carryforward volume cap (as required by IRS Code) before using 2016 volume cap.

Much more carryforward (\$681.1 million) was allocated than actual 2016 volume cap (\$169.5 million) during the Program Year (*Figure 4.1*). Project requests after the August 15th collapse date were not subject to subceiling limits, and because closing dates generally extend into the next program year, issuers were able to convert their reservations into carryforward. This cycle of issuers not using current year volume cap will likely continue for several years as issuers with carryforward must close that volume cap before using current year volume cap.

As of November 15, 2016 \$352.6 million of the state's 2016 PAB volume cap remained unencumbered. Any amounts returned will be converted to carryforward.

82nd Legislature Changes

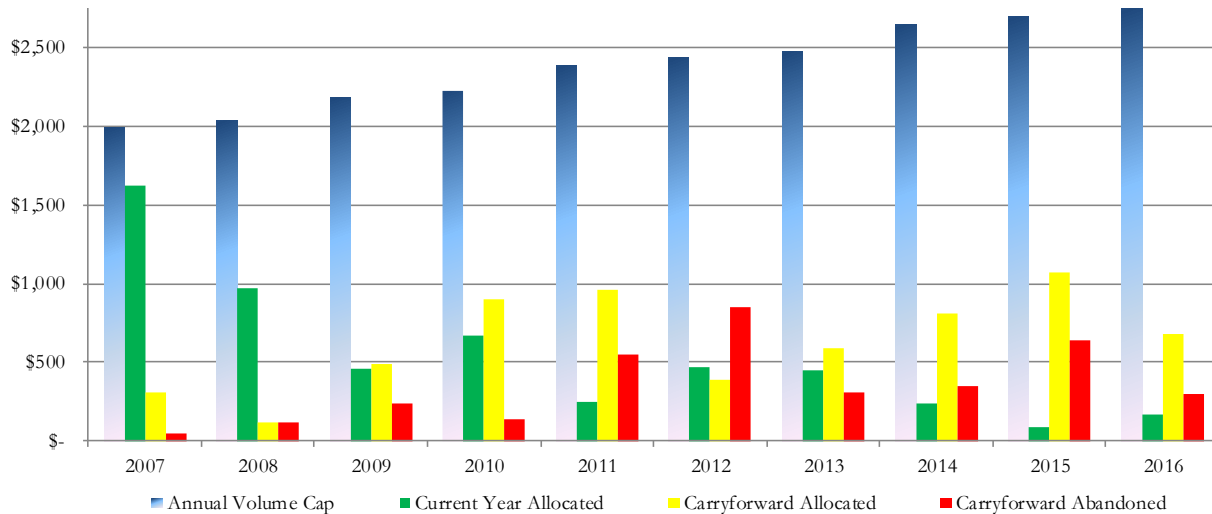
House Bill (HB) 2911 simplified the reservation process for Higher Education Authorities (HEAs) in Subceiling #5. Prior to the change, HEAs were required to provide evidence of student loan need-based demand. HEAs which were able to show the greatest demand received weighted reservations and thus the largest allocations. HB 2911 redefined the assignment of student loan bond allocation to equal the total amount of the allocation for the student loan subceiling divided by the number of qualified HEAs thus removing the need-based provisions.

Prior Legislative Changes

The 81st Legislative Session (2009) passed Senate Bill (SB) 2064 to provide issuers using PAB authority with increased flexibility during difficult market conditions such as those experienced in fiscal year 2009, and to respond to the announcement of new federal bond programs and new federal guidelines for the existing Program.

SB 2064 made the following changes both to the Program and also to the responsibilities of the BRB:

Figure 4.1
STATE OF TEXAS
PRIVATE ACTIVITY BOND ALLOCATION PROGRAM
Current Year vs. Carryforward Allocated
(amounts in millions)



* 2009 and 2010 Carryforward numbers also include HERA cap
Source: Texas Bond Review Board - Private Activity Bond Program.

- If designated by the applicable state official, the BRB is now authorized to administer other bond authority programs created by federal legislation;
- The BRB now has specific authority to administer and create rules for any additional state ceiling that may be created by federal legislation;
- Certain facilities including sewage facilities, solid waste disposal and qualified hazardous waste facilities are now permitted to include multiple projects on one application but are still required to pay an application fee for each facility;
- The project limit for single-family and multifamily issuers was increased to \$40.0 million and \$20.0 million, respectively;
- The single-family utilization percentage was modified so that an issuer who has a low utilization percentage would, at a minimum receive 25 percent of their available allocation, and an issuer who has a utilization percentage above 80 percent

will receive 100 percent of their available allocation;

- Issuers subject to a utilization percentage will not be penalized if in a previous Program Year less than 50 percent of volume cap dedicated to single-family issuers was not allocated for such purposes;
- The last day to apply for a reservation and to receive a reservation was changed from December 1 to November 15; and
- Any unencumbered volume cap at the end of the program year may be granted to any state agency that requests it.

The 80th Legislative Session (2007) gave the Texas Economic Development Bank priority over all other issuers within Subceiling #6 as well as all issuers with carryforward applications. HB 3552 made a number of changes within Subceiling #4 including a provision allowing applications for multiple-site multifamily projects.

The 79th Legislative Session (2005) dedicated \$5.0 million per year of Subceiling #1 for TSAHC to create the Nursing Faculty Home Loan Program and raised the maximum cap per project on Subceiling #6 from \$25.0 million to \$50.0 million.

Legislation passed during the 76th, 77th and 78th Legislative Sessions shifted the distribution of the state's ceiling for the Program among the Subceilings.

Hurricane Ike Bond Authority

In October 2008 the Heartland Disaster Tax Relief Act (HDTRA) of 2008 created \$1,863,270,000 in tax-exempt bonding authority for 34 counties affected by Hurricane Ike. The authority to issue bonds for areas affected by Hurricane Ike expired at the end of 2012.

Hurricane Ike bonds were used for: 1) the acquisition, construction, renovation, and reconstruction of nonresidential real property; 2) the acquisition, construction, renovation, and reconstruction of qualified residential rental property; 3) financing the repair or reconstruction of public utility property; 4) rehabilitation projects at certain existing facilities; and 5) the issuance of qualified mortgage bonds.

Borrowers using Hurricane Ike bond proceeds must have suffered an actual business loss or have received a designation that the business being replaced suffered a loss attributable to Hurricane Ike.

HDTRA required the Governor of Texas to designate projects "on the basis of providing assistance to areas in the order in which assistance is most needed."

On April 10, 2009 the Governor issued Proclamation 41-3177 designating projects in Brazoria, Chambers, Galveston, Jefferson and Orange counties as having priority for utilization of Hurricane Ike bonds. On the

same date Proclamation 41-3178 allocated up to \$300.0 million in authority to Jefferson County Industrial Development Corporation for use by Jefferson Refinery LLC.

The 81st Texas Legislature passed legislation authorizing the BRB to administer the qualified Hurricane Ike disaster area bond program under the direction of the Governor. On December 7, 2009 Governor Perry issued Proclamation 41-3232 providing for administration of the qualified Hurricane Ike disaster area bond program and naming priorities for the designation of such bonds. The proclamation outlined the major requirements of the program and identified the priorities for allocation of the \$1.86 billion of Hurricane Ike bonding authority.

In February 2012, the Governor issued Proclamation 41-3293 that removed the group priorities and allowed all issuers to apply for any remaining bonding authority. As of the expiration of the program (January 1, 2013), approximately \$1.86 billion of the total authority was allocated (99.6%).

Other Bonding Authority

In February 2009 the American Recovery and Reinvestment Act of 2009 (ARRA) created two new types of bonding authority: Build America Bonds (*see Chapters 1 and 2*) and Qualified School Construction Bonds (QSCB). In addition, ARRA expanded three existing authorities: Qualified Zone Academy Bonds, Qualified Energy Conservation Bonds (QECB) and Clean Renewable Energy Bonds. All of these programs have expired except for the QECB Program which has no expiration date.

Texas was allocated \$252,378,000 in QECB authority to be used for qualified energy conservation purposes. Large cities and counties received an allocation based on population size. Other issuers seeking the remaining authority may request a reservation directly from the state.

As of December 1, 2016 all allocated issuers in Texas had \$9.2 million in unused Qualified Energy Conservation Bond authority. Texas had \$38.1 remaining in state authority.

Appendix A
Summary of Bonds Issued

Table A1 BONDS ISSUED IN FY 2016 BY ISSUER	
Texas Department of Housing and Community Affairs	
Governmental Lender Note (Gateway at Hutchins Apartments), Series 2016	29,000,000
Multifamily Note (Garden City Apartments), Series 2016	16,740,000
Multifamily Housing Revenue Bonds (Chisolm Trace and Cheyenne Village Apartments), Series 2016	13,500,000
Multifamily Housing Revenue Bonds (Fifty Oaks and Edinburg Village Apartments), Series 2016	7,400,000
Multifamily Housing Revenue Bonds (Good Samaritan Towers), Series 2015	5,620,000
Multifamily Housing Revenue Bonds (Pass-Through - Williamsburg Apartments), Series 2015	23,150,000
Single Family Mortgage Revenue Refunding Bonds 2015 Series A and Single Family Mortgage Revenue Bonds 2015 Series B	53,695,000
Single Family Mortgage Revenue Refunding Bonds 2016 Series A and Single Family Mortgage Revenue Bonds 2016 Series B	91,245,000
Texas Higher Education Coordinating Board	
State of Texas College Student Loan Bonds, Series 2015	150,000,000
Texas Private Activity Bond Surface Transportation Corporation	
Senior Lien Revenue Bonds (Blueridge Transportation Group LLC, SH 288 Toll Lanes Project) Series 2016 (Tax-Exempt)	272,635,000
Texas Public Finance Authority	
State of Texas General Obligation and Refunding Bonds, Taxable Series 2015C	369,800,000
State of Texas General Obligation Refunding Bonds, Series 2016	157,520,000
Texas State Affordable Housing Corporation	
Multifamily Mortgage Revenue Bonds (Woodside Village Project), Series 2015	5,750,000
Texas State Technical College System	
Constitutional Appropriation Bonds, Series 2016	23,680,000
Revenue Financing System Improvement and Refunding Bonds, Series 2016	56,915,000
Texas Transportation Commission	
State of Texas General Obligation Mobility Fund Refunding Bonds, Series 2015A	911,360,000
State of Texas General Obligation Mobility Fund Refunding Bonds, Series 2015B	254,105,000
State of Texas Highway Improvement General Obligation Bonds, Series 20016	615,000,000
Texas Veterans' Land Board	
State of Texas Veterans Bonds, Series 2016	250,000,000
Texas Water Development Board	
State of Texas Water Financial Assistance Bonds, Series 2015D	234,795,000
State of Texas Water Financial Assistance Bonds, Series 2016A (EDAP)	45,735,000
State of Texas Water Financial Assistance and Refunding Bonds, Series 2016B, State of Texas Water Financial Assistance Refunding Bonds, Series 2016C (EDAP), State of Texas Water Financial Assistance Refunding Bonds, Series 2016D (SPP)	149,540,000
State Water Implementation Revenue Fund for Texas Revenue Bonds, Series 2015AB	810,410,000
Texas Woman's University	
Revenue Financing System Bonds, Series 2016	19,160,000
The Texas A&M University System	
Revenue Financing System Bonds, Taxable Series 2016A	91,520,000
Revenue Financing System Bonds, Taxable Series 2016B	325,575,000
Revenue Financing System Bonds, Series 2016C	207,445,000
Revenue Financing System Bonds, Taxable Series 2016D	176,860,000
Revenue Financing System Bonds, Series 2016E	139,350,000
The University of Texas System	
Permanent University Fund Bonds, Series 2015C	126,020,000
Permanent University Fund Bonds, Series 2016A	117,270,000
Revenue Financing System Taxable Bonds, Series 2016A	255,825,000
Revenue Financing System Green Bonds, Series 2016B	206,040,000
Revenue Financing System Refunding Bonds, Series 2016C	133,240,000
Revenue Financing System Bonds, Series 2016D	213,180,000
Revenue Financing System Bonds, Series 2016E	196,215,000
University of Houston System	
Consolidated Revenue and Refunding Bonds, Series 2016A	100,650,000
Consolidated Revenue and Refunding Bonds, Series 2016B	184,350,000
University of North Texas System	
Revenue Financing System Refunding and Improvement Bonds, Series 2015A	105,130,000
Revenue Financing System Refunding Bonds, Taxable Series 2015B	73,035,000
Revenue Financing System Refunding Bonds, Series 2015C	45,865,000
	\$7,264,325,000
Source: Texas Bond Review Board - Bond Finance Office.	

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Governmental Lender Note (Gateway at Hutchins Apartments), Series 2016

Purpose: Proceeds of the Bonds will be used to (i) construct a 336-unit multifamily residential rental facility located in Hutchins, Texas and, (ii) pay cost of issuance.

Par: \$29,000,000
Method of Sale: Private Placement
Private Sale: August 11, 2016
Closing Date: August 11, 2016
Variable Rate: No
True Interest Cost (TIC): 3.70%
Net Interest Cost (NIC): 3.79%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell LLP	No	150,000	5.17
Financial Advisor	George K. Baum & Company	No	35,000	1.21
Co-Financial Advisor	Kipling Jones	BA	5,000	0.17
Trustee	Wilmington Trust	No	6,000	0.21
Trustee Counsel	Naiman, Howell, Smith & Lee	No	6,500	0.22
Disclosure Counsel	McCall, Parkhurst & Horton LLP	No	6,500	0.22
Issuer's Fees	TDHCA	N/A	222,400	7.67
Private Activity Bond Fee	Texas Bond Review Board	N/A	7,250	0.25
Attorney General		N/A	9,500	0.33
Total			\$ 448,150	\$ 15.45

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Multifamily Note (Garden City Apartments), Series 2016

Purpose: Proceeds of the Bonds will be used to (i) acquire, rehabilitate and equip a 252-unit multifamily residential rental facility located in Houston, Texas and, (ii) pay cost of issuance.

Par: \$16,740,000
Method of Sale: Private Placement
Private Sale: May 16, 2016
Closing Date: May 16, 2016
Variable Rate: No
True Interest Cost (TIC): 4.23%
Net Interest Cost (NIC): 4.10%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell LLP	No	115,000	6.87
Financial Advisor	George K. Baum & Company	No	35,000	2.09
Co-Financial Advisor	Kipling Jones	BA	5,000	0.30
Trustee	Bank of Texas	No	6,500	0.39
Trustee Counsel	Naiman, Howell, Smith & Lee	No	6,000	0.36
Disclosure Counsel	McCall, Parkhurst & Horton LLP	No	6,500	0.39
Issuer's Fees	TDHCA	N/A	134,480	8.03
Private Activity Bond Fee	Texas Bond Review Board	N/A	9,250	0.55
Attorney General		N/A	9,500	0.57
Total			\$ 327,230	\$ 19.55

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Multifamily Housing Revenue Bonds (Chisolm Trace and Cheyenne Village Apartments), Series 2016

Purpose: Proceeds of the Bonds will be used to (i) acquire, rehabilitate and equip a 126-unit multifamily residential rental facility located in San Antonio, Texas, (ii) acquire, rehabilitate and equip a 60-unit multifamily residential rental facility located in San Antonio, Texas and, (iii) pay cost of issuance.

Par: \$13,500,000
Method of Sale: Negotiated
Negotiated Sale: May 12, 2016
Closing Date: May 19, 2016
Variable Rate: No
True Interest Cost (TIC): 1.82%
Net Interest Cost (NIC): 1.80%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell LLP	No	125,000	9.26
Financial Advisor	George K. Baum & Company	No	70,000	5.19
Co-Financial Advisor	Kipling Jones	BA	10,000	0.74
Trustee	Wilmington Trust	No	5,000	0.37
Trustee Counsel	Naiman, Howell, Smith & Lee	No	6,000	0.44
Dislosure Counsel	McCall, Parkhurst & Horton LLP	No	6,500	0.48
Issuer's Fees	TDHCA	N/A	110,150	8.16
Private Activity Bond Fee	Texas Bond Review Board	N/A	13,375	0.99
Attorney General		N/A	9,500	0.70
Housing Tax Credits Fee		N/A	37,272	2.76
Rating Agencies	Rating			
Standard & Poors	A-1+		5,000	0.37
Subtotal			\$ 397,797	\$ 29.47

Underwriting Spread	Amount	Per \$1,000
Management Fee	140,000	10.37
Total	\$ 140,000	\$ 10.37

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Eichner, Norris & Neumann	NA	51,500	3.81	Borrower

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Red Capital Markets	No	100.00%	100.00%	140,000
Total		100.00%	100.00%	140,000

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Multifamily Housing Revenue Bonds (Fifty Oaks and Edinburg Village Apartments), Series 2016

Purpose: Proceeds of the Bonds will be used to (i) acquire, rehabilitate and equip a 50-unit multifamily residential rental facility located in Rockport, Texas, (ii) acquire, rehabilitate and equip a 100-unit multifamily residential rental facility located in Edinburg, Texas and, (iii) pay cost of issuance.

Par: \$7,400,000
Method of Sale: Negotiated
Negotiated Sale: August 25, 2016
Closing Date: August 25, 2016
Variable Rate: No
True Interest Cost (TIC): 1.57%
Net Interest Cost (NIC): 1.56%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell LLP	No	130,000	17.57
Financial Advisor	George K. Baum & Company	No	70,000	9.46
Co-Financial Advisor	Kipling Jones	BA	10,000	1.35
Printing	ImageMaster	No	250	0.03
Trustee	Wilmington Trust	No	10,000	1.35
Trustee Counsel	Naiman, Howell, Smith & Lee	No	13,000	1.76
Disclosure Counsel	McCall, Parkhurst & Horton LLP	No	6,500	0.88
Issuer's Fees	TDHCA	N/A	77,550	10.48
Private Activity Bond Fee	Texas Bond Review Board	N/A	24,700	3.34
Attorney General		N/A	9,500	1.28
Housing Tax Credits Fee		N/A	18,340	2.48
Rating Agencies	Rating			
Standard & Poors	A-1+		2,500	0.34
Subtotal			\$ 372,340	\$ 50.32

Underwriting Spread	Amount	Per \$1,000
Management Fee	62,900	8.50
Total	\$ 62,900	\$ 8.50

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Eichner, Norris & Neumann	NA	50,000	6.76	Borrower

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Citigroup Global Markets	No	100.00%	100.00%	62,900
Total		100.00%	100.00%	62,900

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Multifamily Housing Revenue Bonds (Good Samaritan Towers), Series 2015

Purpose: Proceeds of the Bonds will be used to (i) acquire, rehabilitate and equip a 100-unit multifamily residential rental facility located in El Paso, Texas and, (ii) pay cost of issuance.

Par: \$5,620,000
Method of Sale: Negotiated
Negotiated Sale: August 27, 2015
Closing Date: September 3, 2015
Variable Rate: No
True Interest Cost (TIC): 0.95%
Net Interest Cost (NIC): 0.95%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	100,000	17.79
Co-Bond Counsel	Bates & Coleman PC	BA	26,663	4.74
Financial Advisor	George K. Baum & Company	No	35,000	6.23
Co-Financial Advisor	Kipling Jones	BA	5,000	0.89
Trustee	Wilmington Trust	No	4,750	0.85
Trustee Counsel	McGuire, Craddock & Strother	No	6,500	1.16
Dislosure Counsel	Andrews Kurth LLP	No	5,000	0.89
Issuer's Fees	TDHCA	N/A	52,840	9.40
Private Activity Bond Fee	Texas Bond Review Board	N/A	6,750	1.20
Attorney General		N/A	5,750	1.02
TEFRA Publication Notice		N/A	403	0.07
Housing Tax Credits Fee		N/A	15,890	2.83
Miscellaneous		N/A	2,294	0.41
Rating Agencies	Rating			
Standard & Poors	AA+		4,500	0.80
Subtotal			\$ 271,340	\$ 48.28

Underwriting Spread	Amount	Per \$1,000
Management Fee	167,700	29.84
Total	\$ 167,700	\$ 29.84

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Eichner, Norris & Neumann	NA	35,000	6.23	Borrower

Syndicate Firms' Gross Takedown		Risk	Management Fee	
Syndicate Member	HUB	%	% Amount	\$ Amount
Red Capital Markets	No	100.00%	100.00%	167,700
Total		100.00%	100.00%	167,700

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Multifamily Housing Revenue Bonds (Pass-Through - Williamsburg Apartments), Series 2015

Purpose: Proceeds of the Bonds will be used to (i) finance a portion of the costs to acquire and rehabilitate a 418-unit multifamily residential rental facility located in Grand Prairie, Texas and, (ii) pay cost of issuance.

Par: \$23,150,000
Method of Sale: Negotiated
Negotiated Sale: December 1, 2015
Closing Date: December 9, 2015
Variable Rate: No
True Interest Cost (TIC): 3.47%
Net Interest Cost (NIC): 3.48%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	177,266	7.66
Financial Advisor	George K. Baum & Company	No	35,000	1.51
Co-Financial Advisor	Kipling Jones	BA	5,000	0.22
Trustee	Wilmington Trust	No	6,000	0.26
Trustee Counsel	Petruska & Associates	No	7,000	0.30
Disclosure Counsel	Andrews Kurth LLP	No	6,500	0.28
Issuer's Fees	TDHCA	N/A	183,500	7.93
Private Activity Bond Fee	Texas Bond Review Board	N/A	11,000	0.48
Attorney General		N/A	9,500	0.41
Housing Tax Credits Fee		N/A	49,360	2.13
Miscellaneous		N/A	2,000	0.09
Rating Agencies	Rating			
Standard & Poors	AA+		18,400	0.79
Subtotal			\$ 510,526	\$ 22.05

Underwriting Spread	Amount	Per \$1,000
Management Fee	148,125	6.40
Total	\$ 148,125	\$ 6.40

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Eichner, Norris & Neumann	NA	50,000	2.16	Borrower

Syndicate Firms' Gross Takedown		Risk	Management Fee	
Syndicate Member	HUB	%	% Amount	\$ Amount
Red Capital Markets	No	100.00%	100.00%	148,125
Total		100.00%	100.00%	148,125

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Single Family Mortgage Revenue Refunding Bonds 2015 Series A and Single Family Mortgage Revenue Bonds 2015 Series B

Purpose: Proceeds of the Bonds will be used to (i) refund the Department's outstanding Single Family Variable Rate Mortgage Revenue Bonds 2006 Series H, (ii) purchase of mortgage-backed, pass-through certificates and, (iii) pay cost of issuance.

Par: \$53,695,000
Method of Sale: Negotiated
Negotiated Sale: October 15, 2015
Closing Date: October 29, 2015
Variable Rate: No
True Interest Cost (TIC): 2015A - 3.2% / 2015B - 3.125%
Net Interest Cost (NIC): 2015A - 3.2% / 2015B - 3.125%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	147,661	2.75
Financial Advisor	George K. Baum & Company	No	107,390	2.00
Co-Financial Advisor	Kipling Jones	BA	10,739	0.20
Printing	ImageMaster	No	2,545	0.05
Trustee	Bank of New York Trust	No	5,000	0.09
Trustee Counsel	McGuire, Craddock & Strother	No	15,000	0.28
Disdosure Counsel	McCall, Parkhurst & Horton LLP	No	39,968	0.74
Co-Disdosure Counsel	Mahomes Bolden PC	BA	12,500	0.23
Liquidity Provider		No	18,080	0.34
Cash Flow Verification	Causey Demgen & Moore	No	7,000	0.13
Private Activity Bond Fee	Texas Bond Review Board	N/A	25,500	0.47
Attorney General		N/A	19,000	0.35
Rating Agencies	Rating			
Moody's	Aa1		48,000	0.89
Standard & Poors	AA+		30,500	0.57
Subtotal			\$ 488,883	\$ 9.10

Underwriting Spread	Amount	Per \$1,000
Management Fee	40,271	0.75
Takedown	268,475	5.00
Spread Expenses	52,693	0.98
Total	\$ 361,439	\$ 6.73

*Total Underwriting Spread does include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Chapman & Cutler LLC	NA	42,500	0.79	Underwriter

Syndicate Firms' Gross Takedown		Risk	Management Fee		Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount	% Amount	\$ Amount
Morgan Stanley	No	60.00%	100.00%	40,271	60.06%	161,241
RBC Capital Markets	No	13.33%			26.28%	70,546
Estrada Hinojosa & Co., Inc.	HA	13.33%			1.15%	3,080
Ramirez & Co.	HA	13.33%			12.52%	33,608
Total		100.00%	100.00%	40,271	100.00%	268,475

TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS

Issue: Texas Department of Housing and Community Affairs Single Family Mortgage Revenue Refunding Bonds 2016 Series A and Single Family Mortgage Revenue Bonds 2016 Series B

Purpose: Proceeds of the Bonds will be used to (i) refund certain of the Department's outstanding Single Family Variable Rate Mortgage Revenue Bonds, (ii) purchase of mortgage-backed, pass-through certificates and, (iii) pay cost of issuance.

Par: \$91,245,000
Method of Sale: Negotiated
Negotiated Sale: January 15, 2016
Closing Date: February 24, 2016
Variable Rate: No
True Interest Cost (TIC): 2016A - 3.0% / 2016B - 3.18%
Net Interest Cost (NIC): 2016A - 3.0% / 2016B - 3.18%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	164,241	1.80
Financial Advisor	George K. Baum & Company	No	182,490	2.00
Co-Financial Advisor	Kipling Jones	BA	18,249	0.20
Printing	ImageMaster	No	2,837	0.03
Trustee	Bank of New York Trust	No	6,000	0.07
Trustee Counsel	McGuire, Craddock & Strother	No	15,000	0.16
Disdosure Counsel	McCall, Parkhurst & Horton LLP	No	39,516	0.43
Co-Disdosure Counsel	Mahomes Bolden PC	BA	12,500	0.14
Cash Flow Verification	Causey Demgen & Moore	No	6,500	0.07
Private Activity Bond Fee	Texas Bond Review Board	N/A	10,000	0.11
Attorney General		N/A	19,000	0.21
Rating Agencies	Rating			
Moody's	Aa1		53,000	0.58
Standard & Poors	AA+		40,000	0.44
Subtotal			\$ 569,333	\$ 6.24

Underwriting Spread	Amount	Per \$1,000
Management Fee	91,245	1.00
Takedown	456,225	5.00
Spread Expenses	55,755	0.61
Total	\$ 603,225	\$ 6.61

*Total Underwriting Spread does include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Chapman & Cutler LLC	NA	42,500	0.47	Underwriter

Syndicate Firms' Gross Takedown		Risk	Management Fee		Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount	% Amount	\$ Amount
JP Morgan	No	60.00%	100.00%	91,245	57.68%	263,159
Morgan Stanley	No	13.33%			13.63%	62,199
Ramirez & Co., Inc.	HA	13.33%			8.89%	40,580
RBC Capital Markets	No	13.33%			19.79%	90,288
Total		100.00%	100.00%	91,245	100.00%	456,225

TEXAS HIGHER EDUCATION COORDINATING BOARD

Issue: Texas Higher Education Coordinating Board State of Texas College Student Loan Bonds, Series 2015

Purpose: Proceeds of the Bonds will be used to (i) finance a portion of the costs to acquire and rehabilitate a 418-unit multifamily residential rental facility located in Grand Prairie, Texas and, (ii) pay cost of issuance.

Par: \$150,000,000
Method of Sale: Competitive
Competitive Sale: December 3, 2015
Closing Date: December 15, 2015
Variable Rate: No
True Interest Cost (TIC): 2.92%
Net Interest Cost (NIC): 3.27%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	131,250	0.88
Financial Advisor	First Southwest Company	No	75,000	0.50
Printing	ImageMaster	BA	8,000	0.05
Paying Agent	Wells Fargo Bank	No	5,250	0.04
Private Activity Bond Fee	Texas Bond Review Board	N/A	500	0.00
Attorney General		N/A	9,500	0.06
Electronic Bid/POS	Ipreo Parity	N/A	13,000	0.09
Miscellaneous		N/A	10,000	0.07
Rating Agencies	Rating			
Moody's	Aaa		35,000	0.23
Standard & Poors	AAA		20,000	0.13
Subtotal			\$ 307,500	\$ 2.05

Underwriting Spread	Amount	Per \$1,000
Spread Expenses	253,500	1.69
Total	\$ 253,500	\$ 1.69

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Eidner, Norris & Neumann	NA	50,000	0.33	Borrower

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Wells Fargo	No	100.00%	100.00%	253,500
Total		100.00%	100.00%	253,500

TEXAS PRIVATE ACTIVITY BOND SURFACE TRANSPORTATION CORPORATION

Issue: Texas Private Activity Bond Surface Transportation Corporation Senior Lien Revenue Bonds (Blueridge Transportation Group LLC, SH 288 Toll Lanes Project) Series 2016 (Tax-Exempt)

Purpose: Proceeds of the Bonds will be used to finance the costs of developing, designing, constructing, managing and operating tolled lanes along a portion of the State Highway 288 in Harris County, Texas.

Par: \$272,635,000
Method of Sale: Negotiated
Negotiated Sale: April 28, 2016
Closing Date: May 9, 2016
Variable Rate: No
True Interest Cost (TIC): 4.46%
Net Interest Cost (NIC): 4.72%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	371,545	1.36
Financial Advisor	Bank of Nova Scotia	No	2,759,681	10.12
Financial Advisor*	Estrada Hinojosa & Co., Inc.	HA	38,274	0.14
Printing	ImageMaster	No	2,291	0.01
Trustee	US Bank	No	3,500	0.01
Trustee Counsel	McGuire Woods LLP	No	15,000	0.06
TEFRA Notice		N/A	2,381	0.01
Private Activity Bond Fee		N/A	100,000	0.37
Attorney General		N/A	9,500	0.03
Rating Agencies	Rating			
Moody's	Baa3		478,245	1.75
Fitch	BBB-		493,985	1.81
Subtotal			\$ 4,274,402	\$ 15.68

*Not paid out of bond proceeds

Underwriting Spread	Amount	Per \$1,000
Takedown	1,363,175	5.00
Spread Expenses	85,693	0.31
Total	\$ 1,448,868	\$ 5.31

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Norton, Rose Fulbright LLP	NA	1,248,915	4.58	Borrower

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Citigroup Global Markets	No	50.00%	50.00%	681,588
Bardays Capital	No	50.00%	50.00%	681,588
Total		100.00%	100.00%	1,363,175

TEXAS PUBLIC FINANCE AUTHORITY

Issue: Texas Public Finance Authority State of Texas General Obligation and Refunding Bonds, Taxable Series 2015C

Purpose: Proceeds of the Bonds will be used to (i) make grants for cancer research and prevention and pay for the operation of CPRIT, (ii) refund certain outstanding general obligation commercial paper notes of the State, and (iii) pay the costs of issuance.

Par: \$369,800,000
Method of Sale: Negotiated
Negotiated Sale: October 14, 2015
Closing Date: October 29, 2015
Variable Rate: No
True Interest Cost (TIC): 3.29%
Net Interest Cost (NIC): 3.34%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	60,265	0.16
Financial Advisor	Coastal Securities	No	65,000	0.18
Printing	ImageMaster	No	968	0.00
Escrow Agent	Texas Treasury Safekeeping Trust Company	No	500	0.00
Disclosure Counsel	Andrews Kurth LLP	No	45,000	0.12
Attorney General		N/A	9,500	0.03
Miscellaneous		N/A	5,056	0.01
Rating Agencies	Rating			
Moody's	Aaa		80,000	0.22
Standard & Poors	AAA		39,160	0.11
Fitch	AAA		70,000	0.19
Subtotal			\$ 375,449	\$ 1.02

Underwriting Spread	Amount	Per \$1,000
Management Fee	65,000	0.18
Takedown	1,234,208	3.34
Spread Expenses	93,576	0.25
Total	\$ 1,392,784	\$ 3.59

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Bracewell & Giuliani LLP	NA	40,000	0.11	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Piper Jaffray & Co.	No	45.00%	44.03%	543,407
Goldman Sachs & Co.	No	15.00%	10.05%	123,979
Citigroup Global Markets	No	8.00%	12.79%	157,856
Mesirow Financial, Inc	No	8.00%	7.81%	96,363
RBC Capital Markets	No	8.00%	12.87%	158,802
Siebert, Brandford, Shank & Co.	BA	8.00%	6.08%	75,059
SAMCO Capital Markets	No	8.00%	6.38%	78,741
Total		100.00%	100.00%	1,234,207

TEXAS PUBLIC FINANCE AUTHORITY

Issue: Texas Public Finance Authority State of Texas General Obligation Refunding Bonds, Series 2016

Purpose: Proceeds of the Bonds will be used to (i) advance refund certain outstanding bonds of the State issued by the Authority in order to provide debt service savings, and (ii) pay the costs of issuance.

Par: \$157,520,000
Method of Sale: Negotiated
Negotiated Sale: May 12, 2016
Closing Date: May 26, 2016
Variable Rate: No
True Interest Cost (TIC): 1.99%
Net Interest Cost (NIC): 2.21%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Norton, Rose Fulbright LLP	No	120,000	0.76
Financial Advisor	Coastal Securities	No	70,000	0.44
Printing	ImageMaster	No	916	0.01
Escrow Agent	Texas Treasury Safekeeping Trust Company	No	1,750	0.01
Escrow Verification	Causey Demgen & Moore	No	3,350	0.02
Disclosure Counsel	McCall, Parkhurst & Horton LLP	No	44,231	0.28
Attorney General		N/A	9,500	0.06
Miscellaneous		N/A	4,944	0.03
Rating Agencies	Rating			
Moody's	Aaa		50,000	0.32
Standard & Poors	AAA		20,000	0.13
Fitch	AAA		45,000	0.29
Subtotal			\$ 369,691	\$ 2.35

Underwriting Spread	Amount	Per \$1,000
Takedown	566,675	3.60
Spread Expenses	56,197	0.36
Total	\$ 622,872	\$ 3.95

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	32,500	0.21	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Bardays Capital	No	50.00%	50.00%	283,337
Academy Securities	DV	12.50%	9.42%	53,386
Drexel Hamilton	DV	12.50%	9.78%	55,404
Jefferies & Company	No	12.50%	15.14%	85,787
Ramirez & Co.	HA	12.50%	15.66%	88,761
Total		100.00%	100.00%	566,675

TEXAS STATE AFFORDABLE HOUSING CORPORATION

Issue: Texas State Affordable Housing Corporation Multifamily Mortgage Revenue Bonds (Woodside Village Project) Series 2015

Purpose: Proceeds of the Bonds will be used to finance a portion of the costs to acquire and rehabilitate a multifamily residential rental facility located in Palestine, Texas.

Par: \$5,750,000
Method of Sale: Negotiated
Negotiated Sale: December 7, 2015
Closing Date: December 11, 2015
Variable Rate: No
True Interest Cost (TIC): 1.00%
Net Interest Cost (NIC): 1.00%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Norton, Rose Fulbright LLP	No	56,000	9.74
Financial Advisor	First Southwest Company	No	31,500	5.48
Escrow Verification	Causey Demgen & Moore	No	1,500	0.26
Trustee	Wilmington Trust	No	6,000	1.04
Trustee Counsel	Bracewell & Giuliani LLP	No	6,500	1.13
Issuer's Counsel	Mahomes Bolden PC	BA	15,521	2.70
Private Activity Bond Fee	Texas Bond Review Board	N/A	6,438	1.12
Attorney General		N/A	9,500	1.65
Issuer's Issuance Fee	TSAHC	N/A	20,000	3.48
Issuer's Application Fee	TSAHC	N/A	7,000	1.22
Issuer's Compliance Fee	TSAHC	N/A	4,140	0.72
Negative Arbitrage Deposit		N/A	85,000	14.78
Rating Agencies	Rating			
Standard & Poors	AA+		5,000	0.87
Subtotal			\$ 254,099	\$ 44.19

Underwriting Spread	Amount	Per \$1,000
Management Fee	38,813	6.75
Takedown	7,188	1.25
Spread Expenses	5,000	0.87
Total	\$ 51,001	\$ 8.87

*Total Underwriting Spread does not include Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Jones Walker	NA	36,000	6.26	Issuer

Syndicate Firms' Gross Takedown		Risk	Management Fee		Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount	% Amount	\$ Amount
Stifel, Nicolaus & Company, Inc.	No	100.00%	100.00%	38,813	100.00%	7,188
Total		100.00%	100.00%	38,813	100.00%	7,188

BOARD OF REGENTS OF THE TEXAS STATE TECHNICAL COLLEGE SYSTEM

Issue: Board of Regents of The Texas State Technical College System Constitutional Appropriation Bonds, Series 2016

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of acquiring, purchasing, constructing, improving, enlarging and equipping projects within the System, (ii) refund certain outstanding parity obligations, and (iii) pay the costs of issuance.

Par: \$23,680,000
Method of Sale: Competitive
Competitive Sale: April 5, 2016
Closing Date: April 27, 2016
Variable Rate: No
True Interest Cost (TIC): 1.52%
Net Interest Cost (NIC): 1.69%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	18,676	0.79
Financial Advisor	First Southwest Company	No	42,340	1.79
Printing	i-Deal/FirstSouthwest Company	No	3,760	0.16
Paying Agent	BOKE, NA dba Bank of Texas	No	350	0.01
Attorney General		N/A	9,500	0.40
Miscellaneous		N/A	7,196	0.30
Rating Agencies	Rating			
Moody's	AAA		17,400	0.73
Fitch	AAA		12,587	0.53
Subtotal			\$ 111,809	\$ 4.72

Underwriting Spread	Amount	Per \$1,000
Management Fee	24,371	1.03
Takedown	59,467	2.51
Spread Expenses	6,747	0.28
Total	\$ 90,585	\$ 2.80

Syndicate Firms' Gross Takedown		Risk	Management Fee		Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount	% Amount	\$ Amount
Morgan Stanley & Co.	No	24.83%	24.83%	6,051	24.83%	14,767
Raymond James & Associates	No	24.70%	24.70%	6,020	24.70%	14,689
Fidelity Capital Markets	No	24.70%	24.70%	6,020	24.70%	14,689
Jefferies & Company	No	24.70%	24.70%	6,020	24.70%	14,689
City Securities Corporation	No	1.06%	1.06%	259	1.06%	633
Total		100.00%	100.00%	24,370	100.00%	59,467

BOARD OF REGENTS OF THE TEXAS STATE TECHNICAL COLLEGE SYSTEM

Issue: Board of Regents of The Texas State Technical College System Revenue Financing System Improvement and Refunding Bonds, Series 2016

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of acquiring, purchasing, constructing, improving, enlarging and equipping projects within the System, (ii) refund certain outstanding parity obligations, and (iii) pay the costs of issuance.

Par: \$56,915,000
Method of Sale: Negotiated
Negotiated Sale: April 13, 2016
Closing Date: April 28, 2016
Variable Rate: No
True Interest Cost (TIC): 2.72%
Net Interest Cost (NIC): 2.92%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	33,831	0.59
Financial Advisor	First Southwest Company	No	59,458	1.04
Printing	i-Deal/FirstSouthwest Company	No	2,760	0.05
Paying Agent	BOKF, NA dba Bank of Texas	No	350	0.01
Escrow Agent	BOKF, NA dba Bank of Texas	No	2,750	0.05
Escrow Verification	Grant Thornton	No	3,500	0.06
Attorney General		N/A	9,500	0.17
Miscellaneous		N/A	2,373	0.04
Credit Enhancement	Assured Guaranty	No	111,337	1.96
Rating Agencies	Rating			
Moody's	A1		42,600	0.75
Standard & Poors	AA		28,215	0.50
Fitch	A		32,413	0.57
Subtotal			\$ 329,087	\$ 5.78

Underwriting Spread	Amount	Per \$1,000
Takedown	260,025	4.57
Spread Expenses	93,579	1.64
Total	\$ 353,604	\$ 6.21

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	30,000	0.53	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Raymond James & Associates	No	40.00%	40.00%	104,010
Citigroup Global Markets	No	30.00%	30.00%	78,007
Siebert, Brandford, Shank & Co.	BA	30.00%	30.00%	78,007
Total		100.00%	100.00%	260,024

TEXAS TRANSPORTATION COMMISSION

Issue: Texas Transportation Commission State of Texas General Obligation Mobility Fund Refunding Bonds, Series 2015A

Purpose: Proceeds of the Bonds will be used to (i) refund certain Outstanding Parity Debt to achieve debt service savings, and (ii) pay the costs of issuance.

Par: \$911,360,000
Method of Sale: Negotiated
Negotiated Sale: September 16, 2015
Closing Date: September 30, 2015
Variable Rate: No
True Interest Cost (TIC): 3.43%
Net Interest Cost (NIC): 3.73%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	183,272	0.20
Financial Advisor	Estrada Hinojosa & Co., Inc.	HA	90,220	0.10
Printing	ImageMaster	No	1,983	0.00
Paying Agent	Amegy Bank NA	No	250	0.00
Escrow Agent	Amegy Bank NA	No	300	0.00
Escrow Verification	The Arbitrage Group	No	2,050	0.00
Disclosure Counsel	Andrews Kurth LLP	No	91,136	0.10
Escrow Bidding Fee	Winters & Associates/Estrada Hinojosa & Co., Inc.	NO/HA	39,000	0.04
Attorney General		N/A	9,500	0.01
Miscellaneous		N/A	35,934	0.04
Rating Agencies	Rating			
Moody's	Aaa		109,476	0.12
Standard and Poors	AAA		80,199	0.09
Fitch	AAA		86,017	0.09
Subtotal			\$ 729,337	\$ 0.80

Underwriting Spread	Amount	Per \$1,000
Takedown	3,369,694	3.70
Spread Expenses	190,223	0.21
Total	\$ 3,559,917	\$ 3.91

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Loke Lord LLP	NA	60,000	0.07	Underwriter
Co-Underwriter's Counsel	Mahomes Bolden PC	BA	30,000	0.03	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
JP Morgan	No	36.00%	38.92%	1,311,351
Piper Jaffray & Co.	No	25.50%	20.68%	696,795
Frost Bank	No	5.50%	5.11%	172,122
Goldman Sachs & Co.	No	5.50%	7.05%	237,422
Jefferies & Company	No	5.50%	4.89%	164,716
Loop Capital Markets	BA	5.50%	5.07%	170,890
Raymond James and Associates	No	5.50%	6.19%	208,611
Siebert, Brandford, Shank & Co.	BA/WO	5.50%	4.97%	167,326
Wells Fargo	No	5.50%	6.96%	234,586
Academy Securities	DV	0.00%	0.17%	5,813
BOSC	No	0.00%	0.00%	-
Coastal Securities	No	0.00%	0.00%	-
Drexel Hamilton	DV	0.00%	0.00%	63
IFS Securities	BA	0.00%	0.00%	-
Mischler Financial Group	DV	0.00%	0.00%	-
Vandham Securities	DV	0.00%	0.00%	-
Total		100.00%	100.00%	3,369,694

TEXAS TRANSPORTATION COMMISSION

Issue: Texas Transportation Commission State of Texas General Obligation Mobility Fund Refunding Bonds, Series 2015B

Purpose: Proceeds of the Bonds will be used to (i) refund certain Outstanding Parity debt to achieve debt service savings, and (ii) pay the costs of issuance.

Par: \$254,105,000
Method of Sale: Private Placement
Private Sale: October 1, 2015
Closing Date: October 7, 2015
Variable Rate: No
True Interest Cost (TIC): 3.82%
Net Interest Cost (NIC): 4.18%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	50,821	0.20
Financial Advisor	Estrada Hinojosa & Co., Inc	HA	24,172	0.10
Paying Agent	Wells Fargo	No	1,000	0.00
Attorney General		N/A	9,500	0.04
Miscellaneous		N/A	23,033	0.09
Rating Agencies	Rating			
Moody's	Aaa		30,524	0.12
Standard and Poors	AAA		8,000	0.03
Fitch	AAA		23,983	0.09
Total			\$ 171,033	\$ 0.67

TEXAS TRANSPORTATION COMMISSION

Issue: Texas Transportation Commission State of Texas Highway Improvement General Obligation Bonds, Series 2016

Purpose: Proceeds of the Bonds will be used to (i) pay, or reimburse the State Highway Fund for payment of, all or part of the costs of highway improvement projects, (ii) to pay the costs of administering projects authorized under the Enabling Act, and (iii) pay costs of issuance.

Par: \$615,000,000
Method of Sale: Negotiated
Negotiated Sale: April 19, 2016
Closing Date: May 4, 2016
Variable Rate: No
True Interest Cost (TIC): 3.14%
Net Interest Cost (NIC): 3.62%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	93,250	0.15
Financial Advisor	Estrada Hinojosa & Co., Inc.	HA	104,978	0.17
Printing	ImageMaster	No	1,966	0.00
Paying Agent	US Bank NA	No	300	0.00
Disclosure Counsel	Bracewell LLP	No	61,500	0.10
Attorney General		N/A	9,500	0.02
Miscellaneous		N/A	1,286	0.00
Rating Agencies	Rating			
Moody's	Aaa		93,500	0.15
Standard and Poors	AAA		54,868	0.09
Fitch	AAA		95,000	0.15
Subtotal			\$ 516,148	\$ 0.84

Underwriting Spread	Amount	Per \$1,000
Takedown	2,133,025	3.47
Spread Expenses	113,337	0.18
Total	\$ 2,246,362	\$ 3.65

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Winstead PC	NA	41,000	0.07	Underwriter
Co-Underwriter's Counsel	Mahomes Bolden PC	BA	20,500	0.03	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Bank of America Merrill Lynch	No	55.00%	52.22%	1,113,799
Goldman Sachs & Co.	No	15.00%	14.32%	305,483
Blaylock Beal Van, LLC	BA	5.00%	3.92%	83,602
Frost Bank	No	5.00%	4.88%	104,189
Jefferies & Company	No	5.00%	5.56%	118,582
Mesirow Financial, Inc.	No	5.00%	5.58%	118,933
Ramirez & Co.	HA	5.00%	4.63%	98,740
Wells Fargo	No	5.00%	8.73%	186,248
Academy Securities	DV	0.00%	0.00%	-
Coastal Securities	No	0.00%	0.00%	-
Drexel Hamilton	DV	0.00%	0.00%	-
Fidelity Capital Markets	No	0.00%	0.16%	3,450
IFS Securities	BA	0.00%	0.00%	-
Mischler Financial Group	DV	0.00%	0.00%	-
Total		100.00%	100.00%	2,133,025

TEXAS VETERANS' LAND BOARD

Issue: Texas Veterans' Land Board State of Texas Veterans Bonds, Series 2016

Purpose: Proceeds of the Bonds will be used to (i) provide funds for the Veterans' Housing Assistance Fund II to make Home Loans to eligible Texas veterans, and (ii) pay the costs of issuance.

Par: \$250,000,000
Method of Sale: Negotiated
Negotiated Sale: January 20, 2016
Closing Date: January 21, 2016
Variable Rate: Yes

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	125,000	0.50
Co-Bond Counsel	Lannen & Oliver PC	BA	30,365	0.12
Financial Advisor	George K. Baum & Company	No	87,500	0.35
Printing	Island	No	1,124	0.00
Liquidity Provider's Counsel	King & Spalding	No	21,000	0.08
Liquidity Provider's Foreign Counsel	Juergen Necker	No	3,500	0.01
Attorney General		N/A	9,500	0.04
Rating Agencies	Rating			
Moody's	Aaa		20,000	0.08
Subtotal			\$ 297,989	\$ 1.19

Underwriting Spread	Amount	Per \$1,000
Spread Expenses	37,000	0.15
Total	\$ 37,000	\$ 0.15

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	25,000	0.10	Underwriter
Co-Underwriter's Counsel	Mahomes Bolden & Warren PC	BA	5,000	0.02	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
BNY Mellon Capital Markets	No	75.00%	75.00%	-
Academy Securities	DV	25.00%	25.00%	-
Total		100.00%	100.00%	-

TEXAS WATER DEVELOPMENT BOARD

Issue: Texas Water Development Board State of Texas Water Financial Assistance Bonds, Series 2015D

Purpose: Proceeds of the Bonds will be used to (i) provide funds for the financial assistance account, fund financial assistance projects and provide assistance to political subdivisions, and (ii) pay the costs of issuance.

Par: \$234,795,000
Method of Sale: Negotiated
Negotiated Sale: October 27, 2015
Closing Date: November 24, 2015
Variable Rate: No
True Interest Cost (TIC): 3.79%
Net Interest Cost (NIC): 3.97%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	51,735	0.22
Financial Advisor	Estrada Hinojosa & Co., Inc.	HA	102,500	0.44
Printing	ImageMaster	No	5,000	0.02
Paying Agent	Bank of New York Mellon	No	750	0.00
Disclosure Counsel	Mahomes Bolden PC	No	46,500	0.20
Attorney General		N/A	9,500	0.04
Miscellaneous		N/A	5,765	0.02
Rating Agencies	Rating			
Moody's	Aaa		25,000	0.11
Standard & Poors	AAA		22,000	0.09
Fitch	AAA		33,000	0.14
Subtotal			\$ 301,750	\$ 1.29

Underwriting Spread	Amount	Per \$1,000
Takedown	852,944	3.63
Spread Expenses	64,249	0.27
Total	\$ 917,193	\$ 3.91

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Winstead PC	NA	35,000	0.15	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Jefferies & Company	No	50.00%	50.00%	426,472
Frost Bank	No	10.00%	10.00%	85,294
FTN Financial Capital Markets	No	10.00%	10.00%	85,294
Piper Jaffray & Co.	No	10.00%	10.00%	85,294
Siebert, Brandford, Shank & Co.	BA	10.00%	10.00%	85,294
Wells Fargo	No	10.00%	10.00%	85,294
Total		100.00%	100.00%	852,944

TEXAS WATER DEVELOPMENT BOARD

Issue: Texas Water Development Board State of Texas Water Financial Assistance Bonds, Series 2016A (EDAP)

Purpose: Proceeds of the Bonds will be used to (i) provide funds for the EDAP account for EDAP projects, and (ii) pay the costs of issuance.

Par: \$45,735,000
Method of Sale: Negotiated
Negotiated Sale: March 23, 2016
Closing Date: April 19, 2016
Variable Rate: No
True Interest Cost (TIC): 2.61%
Net Interest Cost (NIC): 2.76%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Escamilla & Poneck, LLP	HA	50,251	1.10
Financial Advisor	First Southwest Company	No	50,152	1.10
Printing	ImageMaster	No	1,159	0.03
Paying Agent	Bank of New York Mellon	No	592	0.01
Disclosure Counsel	Norton, Rose Fulbright LLP	No	47,513	1.04
Attorney General		N/A	9,500	0.21
Miscellaneous		N/A	2,516	0.06
Rating Agencies	Rating			
Moody's	Aaa		20,000	0.44
Standard & Poors	AAA		20,000	0.44
Fitch	AAA		25,000	0.55
Subtotal			\$ 226,683	\$ 4.96

Underwriting Spread	Amount	Per \$1,000
Takedown	134,985	2.95
Spread Expenses	37,371	0.82
Total	\$ 172,356	\$ 3.77

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Bates & Coleman PC	BA	25,000	0.55	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Piper Jaffray & Co.	No	46.00%	49.12%	66,309
FTN Financial Capital Markets	No	18.00%	14.02%	18,928
Ramirez & Co.	HA	18.00%	16.55%	22,337
Wells Fargo	No	18.00%	20.31%	27,410
Total		100.00%	100.00%	134,984

TEXAS WATER DEVELOPMENT BOARD

Issue: Texas Water Development Board State of Texas Water Financial Assistance and Refunding Bonds, Series 2016B, State of Texas Water Financial Assistance Refunding Bonds, Series 2016C (EDAP), State of Texas Water Financial Assistance Refunding Bonds, Series 2016D (SPP)

Purpose: Proceeds of the Bonds will be used to (i) provide funds for the financial assistance account, fund financial assistance projects and provide assistance to political subdivisions, (ii) refund certain Outstanding Obligations, and (ii) pay the costs of issuance.

Par: \$149,540,000
Method of Sale: Negotiated
Negotiated Sale: July 14, 2016
Closing Date: July 14, 2016
Variable Rate: No
True Interest Cost (TIC): 2.16%
Net Interest Cost (NIC): 2.39%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	50,730	0.34
Financial Advisor	First Southwest Company	No	132,500	0.89
Printing	ImageMaster	No	8,500	0.06
Paying Agent	Bank of New York Mellon	No	5,500	0.04
Tender Agent	Bank of New York Mellon	No	10,000	0.07
Dislosure Counsel	Mahomes Bolden PC	No	51,000	0.34
Attorney General		N/A	28,500	0.19
Miscellaneous		N/A	34,000	0.23
Rating Agencies	Rating			
Moody's	Aaa		30,000	0.20
Standard & Poors	AAA		20,000	0.13
Fitch	AAA		30,000	0.20
Subtotal			\$ 400,730	\$ 2.68

Underwriting Spread	Amount	Per \$1,000
Takedown	460,161	3.08
Spread Expenses	52,543	0.35
Total	\$ 512,704	\$ 3.43

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	25,000	0.17	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
JP Morgan	No	48.00%	58.09%	267,286
Coastal Securities, Inc.	No	13.00%	9.03%	41,570
Goldman, Sachs & Co.	No	13.00%	12.50%	57,510
Piper Jaffray & Co.	No	13.00%	14.23%	65,504
Stifel, Nicolaus & Company, Inc.	No	13.00%	6.15%	28,292
Total		100.00%	100.00%	460,161

TEXAS WATER DEVELOPMENT BOARD

Issue: Texas Water Development Board State Water Implementation Revenue Fund for Texas Revenue Bonds, Series 2015AB

Purpose: Proceeds of the Bonds will be used to (i) provide funds to finance projects to implement the State Water Plan, and (ii) pay the costs of issuance.

Par: \$810,410,000
Method of Sale: Negotiated
Negotiated Sale: October 7, 2015
Closing Date: November 4, 2015
Variable Rate: No
True Interest Cost (TIC): 3.64%
Net Interest Cost (NIC): 3.91%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	154,980	0.19
Financial Advisor	First Southwest Company	No	411,650	0.51
Co-Financial Advisor	Estrada Hinojosa & Co., Inc.	HA	243,715	0.30
Printing	ImageMaster	No	2,020	0.00
Trustee	Bank of New York Mellon	No	73,250	0.09
Trustee Counsel	Nixon Peabody LLP	No	5,100	0.01
Disclosure Counsel	The Hardwick Law Firm LLC	No	50,000	0.06
Attorney General		N/A	19,000	0.02
Miscellaneous		N/A	18,092	0.02
Rating Agencies	Rating			
Standard & Poors	AAA		125,000	0.15
Fitch	AAA		125,000	0.15
Subtotal			\$ 1,227,807	\$ 1.52

Underwriting Spread	Amount	Per \$1,000
Takedown	2,781,600	3.43
Spread Expenses	277,367	0.34
Total	\$ 3,058,967	\$ 3.77

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Loke Lord LLP	NA	80,000	0.10	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Citigroup Global Markets	No	55.00%	62.40%	1,735,797
Bank of America Merrill Lynch	No	5.00%	4.32%	120,203
Coastal Securities Inc.	No	5.00%	4.09%	113,743
JP Morgan	No	5.00%	4.09%	113,780
Loop Capital Markets	BA	5.00%	4.03%	112,055
Morgan Stanley	No	5.00%	4.55%	126,575
Piper Jaffray & Co.	No	5.00%	4.08%	113,405
RBC Capital Markets	No	5.00%	4.10%	114,054
SAMCO Capital Markets	No	5.00%	4.11%	114,305
Siebert, Brandford, Shank & Co.	BA	5.00%	4.23%	117,680
Total		100.00%	100.00%	2,781,600

TEXAS WOMAN'S UNIVERSITY

Issue: Board of Regents of Texas Woman's University Revenue Financing System Bonds, Series 2016

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of campus improvements of certain members of the Revenue Financing System, and (ii) pay the costs of issuance.

Par: \$19,160,000
Method of Sale: Negotiated
Negotiated Sale: July 28, 2016
Closing Date: August 23, 2016
Variable Rate: No
True Interest Cost (TIC): 2.69%
Net Interest Cost (NIC): 2.87%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	14,425	0.75
Financial Advisor	RBC Capital Markets	No	60,926	3.18
Printing	i-Deal/Clements	No	1,776	0.09
Paying Agent	Bank of Texas	No	400	0.02
Attorney General		N/A	9,500	0.50
Miscellaneous		N/A	6,095	0.32
Rating Agencies	Rating			
Moody's	Aa3		26,000	1.36
Subtotal			\$ 119,122	\$ 6.22

Underwriting Spread	Amount	Per \$1,000
Management Fee	14,370	0.75
Takedown	86,311	4.50
Spread Expenses	20,977	1.09
Total	\$ 121,658	\$ 6.35

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	14,500	0.76	Underwriter

Syndicate Firms' Gross Takedown		Risk	Management Fee		Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount	% Amount	\$ Amount
Hilltop Securities	No	100.00%	100.00%	14,370	100.00%	86,311
Total		100.00%	100.00%	86,311	100.00%	86,311

BOARD OF REGENTS OF THE TEXAS A&M UNIVERSITY SYSTEM

Issue: Board of Regents of The Texas A&M University System Revenue Financing System Bonds, Taxable Series 2016A

Purpose: Proceeds of the Bonds will be used to (i) refund certain outstanding long-term parity obligations, and (ii) pay the costs of issuance.

Par: \$91,520,000
Method of Sale: Negotiated
Negotiated Sale: March 21, 2016
Closing Date: April 12, 2016
Variable Rate: No
True Interest Cost (TIC): 2.84%
Net Interest Cost (NIC): 2.89%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Andrews Kurth LLP	No	28,086	0.31
Financial Advisor	First Southwest Company	No	45,815	0.50
Printing	i-Deal/FirstSouthwest Company	No	825	0.01
Paying Agent	BOKE, NA dba Bank of Texas	No	2,800	0.03
Escrow Agent	BOKE, NA dba Bank of Texas	No	1,500	0.02
Escrow Verification	Causey Demgen & Moore	No	2,250	0.02
Disclosure Counsel	Andrews Kurth LLP	No	6,583	0.07
Attorney General		N/A	9,500	0.10
Miscellaneous		N/A	8,821	0.10
Rating Agencies	Rating			
Moody's	Aaa		26,770	0.29
Standard & Poors	AAA		23,917	0.26
Fitch	AA+		17,554	0.19
Subtotal			\$ 174,421	\$ 1.91

Underwriting Spread	Amount	Per \$1,000
Takedown	260,901	2.85
Spread Expenses	35,180	0.38
Total	\$ 296,081	\$ 3.24

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	McCall, Parkhurst & Horton LLP	NA	14,643	0.16	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Raymond James & Associates	No	60.00%	60.00%	156,541
Siebert, Brandford, Shank & Co.	BA	40.00%	40.00%	104,361
Total		100.00%	100.00%	260,902

BOARD OF REGENTS OF THE TEXAS A&M UNIVERSITY SYSTEM

Issue: Board of Regents of The Texas A&M University System Revenue Financing System Bonds, Taxable Series 2016B

Purpose: Proceeds of the Bonds will be used to (i) provide construction funds for projects for Participants within the A&M system, (ii) refund a portion of the Board's outstanding commercial paper notes, and (iii) pay the costs of issuance.

Par: \$325,575,000
Method of Sale: Negotiated
Negotiated Sale: March 21, 2016
Closing Date: April 12, 2016
Variable Rate: No
True Interest Cost (TIC): 3.69%
Net Interest Cost (NIC): 3.74%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Andrews Kurth LLP	No	99,914	0.31
Financial Advisor	First Southwest Company	No	162,983	0.50
Printing	i-Deal/FirstSouthwest Company	No	2,935	0.01
Paying Agent	BOKF, NA dba Bank of Texas	No	2,800	0.01
Disclosure Counsel	Andrews Kurth LLP	No	23,417	0.07
Attorney General		N/A	9,500	0.03
Miscellaneous		N/A	3,267	0.01
Rating Agencies	Rating			
Moody's	Aaa		95,230	0.29
Standard & Poors	AAA		85,083	0.26
Fitch	AA+		62,446	0.19
Subtotal			\$ 547,575	\$ 1.68

Underwriting Spread	Amount	Per \$1,000
Takedown	1,293,100	3.97
Spread Expenses	102,324	0.31
Total	\$ 1,395,424	\$ 4.29

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	McCall, Parkhurst & Horton LLP	NA	52,092	0.16	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
RBC Capital Markets	No	40.00%	40.00%	39,029
Goldman Sachs & Co.	No	20.00%	20.00%	19,514
Ramirez & Co.	HA	20.00%	20.00%	19,514
Loop Capital Markets	BA	20.00%	20.00%	19,514
Total		100.00%	100.00%	97,571

BOARD OF REGENTS OF THE TEXAS A&M UNIVERSITY SYSTEM

Issue: Board of Regents of The Texas A&M University System Revenue Financing System Bonds, Series 2016C

Purpose: Proceeds of the Bonds will be used to (i) refund certain outstanding long-term parity obligations, and (ii) pay the costs of issuance.

Par: \$207,445,000
Method of Sale: Negotiated
Negotiated Sale: June 28, 2016
Closing Date: July 20, 2016
Variable Rate: No
True Interest Cost (TIC): 2.14%
Net Interest Cost (NIC): 2.46%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Andrews Kurth LLP	No	49,519	0.24
Financial Advisor	First Southwest Company	No	107,396	0.52
Printing	i-Deal/FirstSouthwest Company	No	1,780	0.01
Paying Agent	Wilmington Trust	No	4,000	0.02
Escrow Agent	Wilmington Trust	No	2,250	0.01
Escrow Verification	Causey Demgen & Moore	No	2,496	0.01
Disclosure Counsel	Andrews Kurth LLP	No	11,884	0.06
Attorney General		N/A	9,500	0.05
Miscellaneous		N/A	668	0.00
Rating Agencies	Rating			
Moody's	Aaa		49,717	0.24
Standard & Poors	AAA		39,377	0.19
Subtotal			\$ 278,587	\$ 1.34

Underwriting Spread	Amount	Per \$1,000
Takedown	635,911	3.07
Spread Expenses	46,693	0.23
Total	\$ 682,604	\$ 3.29

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Orrick, Herrington & Sutcliffe	NA	23,850	0.11	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Morgan Stanley	No	40.00%	54.58%	347,090
Mesirow Financial, Inc	No	20.00%	20.09%	127,779
FTN Financial Capital Markets	No	20.00%	15.88%	100,963
Backstrom, McCarley Berry & Co.	BA	20.00%	9.45%	60,080
Total		100.00%	100.00%	635,912

BOARD OF REGENTS OF THE TEXAS A&M UNIVERSITY SYSTEM

Issue: Board of Regents of The Texas A&M University System Revenue Financing System Bonds, Taxable Series 2016D

Purpose: Proceeds of the Bonds will be used to (i) provide construction funds for projects within the system, (ii) refund certain outstanding long-term parity obligations, and (iii) pay the costs of issuance.

Par: \$176,860,000
Method of Sale: Negotiated
Negotiated Sale: June 28, 2016
Closing Date: July 20, 2016
Variable Rate: No
True Interest Cost (TIC): 2.96%
Net Interest Cost (NIC): 3.01%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Andrews Kurth LLP	No	42,218	0.24
Financial Advisor	First Southwest Company	No	89,338	0.51
Printing	i-Deal/FirstSouthwest Company	No	1,780	0.01
Paying Agent	Wilmington Trust	No	4,000	0.02
Escrow Agent	Wilmington Trust	No	2,250	0.01
Escrow Verification	Causey Demgen & Moore	No	2,128	0.01
Dislosure Counsel	Andrews Kurth LLP	No	10,132	0.06
Attorney General		N/A	9,500	0.05
Miscellaneous		N/A	918	0.01
Rating Agencies	Rating			
Moody's	Aaa		42,387	0.24
Standard & Poors	AAA		33,572	0.19
Subtotal			\$ 238,223	\$ 1.35

Underwriting Spread	Amount	Per \$1,000
Takedown	644,431	3.64
Spread Expenses	37,378	0.21
Total	\$ 681,809	\$ 3.86

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Orrick, Herrington & Sutcliffe	NA	21,150	0.12	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Wells Fargo	No	50.00%	50.75%	327,053
Hutchinson, Shockey, Erley & Co.	No	25.00%	24.62%	158,689
Blaylock Beal Van, LLC	BA	25.00%	24.62%	158,689
Total		100.00%	100.00%	644,431

BOARD OF REGENTS OF THE TEXAS A&M UNIVERSITY SYSTEM

Issue: Board of Regents of The Texas A&M University System Revenue Financing System Bonds, Series 2016E

Purpose: Proceeds of the Bonds will be used to (i) refund certain outstanding long-term parity obligations, and (ii) pay the costs of issuance.

Par: \$139,350,000
Method of Sale: Negotiated
Negotiated Sale: July 13, 2016
Closing Date: July 20, 2016
Variable Rate No
True Interest Cost (TIC): 1.90%
Net Interest Cost (NIC): 2.10%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Andrews Kurth LLP	No	33,264	0.24
Financial Advisor	First Southwest Company	No	66,094	0.47
Printing	i-Deal/FirstSouthwest Company	No	3,618	0.03
Paying Agent	Wilmington Trust	No	4,000	0.03
Escrow Agent	Wilmington Trust	No	2,250	0.02
Escrow Verification	Causey Demgen & Moore	No	1,677	0.01
Dislosure Counsel	Andrews Kurth LLP	No	7,983	0.06
Attorney General		N/A	9,500	0.07
Miscellaneous		N/A	416	0.00
Rating Agencies	Rating			
Moody's	Aaa		33,397	0.24
Standard & Poors	AAA		26,451	0.19
Subtotal			\$ 188,650	\$ 1.35

Underwriting Spread	Amount	Per \$1,000
Takedown	419,328	3.01
Spread Expenses	41,639	0.30
Total	\$ 460,967	\$ 3.31

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Orrick, Herrington & Sutcliffe	NA	25,000	0.18	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Estrada Hinojosa & Co., Inc	HA	45.00%	44.21%	185,396
George K. Baum & Company	No	27.50%	42.39%	177,752
Academy Securities	DV	27.50%	13.40%	56,180
Total		100.00%	100.00%	419,328

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Permanent University Fund Bonds, Series 2015C

Purpose: Proceeds of the Bonds will be used to (i) refund certain short-term obligations of the Board in order to achieve long-term financing, and (ii) pay the costs of issuance.

Par: \$126,020,000
Method of Sale: Negotiated
Negotiated Sale: December 1, 2015
Closing Date: December 9, 2015
Variable Rate: No
True Interest Cost (TIC): 3.80%
Net Interest Cost (NIC): 3.79%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	66,607	0.53
Printing	ImageMaster	No	1,800	0.01
Paying Agent	US Bank	No	3,800	0.03
Attorney General		N/A	9,500	0.08
Contingency		N/A	2,718	0.02
Rating Agencies	Rating			
Moody's	Aaa		25,899	0.21
Standard & Poors	AAA		29,732	0.24
Subtotal			\$ 140,056	\$ 1.11

Underwriting Spread	Amount	Per \$1,000
Takedown	315,050	2.50
Spread Expenses	34,224	0.27
Total	\$ 349,274	\$ 2.77

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	22,500	0.18	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Wells Fargo	No	60.00%	60.00%	189,030
Goldman Sachs & Co.	No	13.40%	13.40%	42,217
Loop Capital Markets	BA	13.30%	13.30%	41,902
Raymond James & Associates	No	13.30%	13.30%	41,902
Total		100.00%	100.00%	315,050

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Permanent University Fund Bonds, Series 2016A

Purpose: Proceeds of the Bonds will be used to (i) refund certain short-term obligations of the Board in order to achieve long-term financing, and (ii) pay the costs of issuance.

Par: \$117,270,000
Method of Sale: Negotiated
Negotiated Sale: December 1, 2015
Closing Date: January 5, 2016
Variable Rate: No
True Interest Cost (TIC): 2.96%
Net Interest Cost (NIC): 3.27%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Bracewell & Giuliani LLP	No	54,545	0.47
Printing	ImageMaster	No	1,800	0.02
Paying Agent	US Bank	No	3,800	0.03
Attorney General		N/A	9,500	0.08
Contingency		N/A	1,535	0.01
Rating Agencies	Rating			
Moody's	Aaa		24,101	0.21
Standard & Poors	AAA		27,668	0.24
Subtotal			\$ 122,949	\$ 1.05

Underwriting Spread	Amount	Per \$1,000
Takedown	293,175	2.50
Spread Expenses	34,075	0.29
Total	\$ 327,250	\$ 2.79

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	22,500	0.19	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Wells Fargo	No	60.00%	57.50%	168,574
BOSC	No	10.00%	6.98%	20,455
First Southwest Company	No	10.00%	12.01%	35,202
George K. Baum & Company	No	10.00%	8.70%	25,520
Loop Capital Markets	BA	10.00%	14.81%	43,425
Total		100.00%	100.00%	293,175

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Revenue Financing System Taxable Bonds, Series 2016A

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of campus improvements of certain members of the Revenue Financing System, (ii) refund a portion of the Board's Revenue Financing System Commercial Paper Notes, and (iii) pay the costs of issuance.

Par: \$255,825,000
Method of Sale: Negotiated
Negotiated Sale: January 1, 2016
Closing Date: January 14, 2016
Variable Rate: No
True Interest Cost (TIC): 3.87%
Net Interest Cost (NIC): 3.86%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	85,716	0.34
Financial Advisor	Mohanty Gargiulo LLC	WO	25,000	0.10
Printing	ImageMaster	No	1,759	0.01
Paying Agent	Bank of Texas	No	3,800	0.01
Disdosure Counsel	McCall, Parkhurst & Horton LLP	No	18,603	0.07
Attorney General		N/A	9,500	0.04
Miscellaneous		N/A	2,996	0.01
Rating Agencies	Rating			
Moody's	Aaa		40,157	0.16
Standard & Poors	AAA		38,385	0.15
Subtotal			\$ 225,916	\$ 0.88

Underwriting Spread	Amount	Per \$1,000
Takedown	639,563	2.50
Spread Expenses	51,548	0.20
Total	\$ 691,111	\$ 2.70

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	24,925	0.10	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Bank of America Merrill Lynch	No	52.00%	52.00%	332,573
Bardays Capital	No	8.00%	8.00%	51,165
Estrada Hinojosa & Co., Inc	HA	8.00%	8.00%	51,165
Mesirov Financial, Inc	No	8.00%	8.00%	51,165
Piper Jaffray & Co.	No	8.00%	8.00%	51,165
RBC Capital Markets	No	8.00%	8.00%	51,165
Siebert, Brandford, Shank & Co.	BA	8.00%	8.00%	51,165
Total		100.00%	100.00%	639,563

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Revenue Financing System Green Bonds, Series 2016B

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of campus improvements of certain members of the Revenue Financing System, (ii) refund a portion of the Board's Revenue Financing System Commercial Paper Notes, and (iii) pay the costs of issuance.

Par: \$206,040,000
Method of Sale: Negotiated
Negotiated Sale: January 1, 2016
Closing Date: January 22, 2016
Variable Rate: No
True Interest Cost (TIC): 3.21%
Net Interest Cost (NIC): 3.49%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	77,614	0.38
Printing	ImageMaster	No	1,798	0.01
Paying Agent	US Bank	No	3,500	0.02
Disdosure Counsel	McCall Parkhurst & Horton	No	16,397	0.08
Attorney General		N/A	9,500	0.05
Miscellaneous		N/A	4,789	0.02
Rating Agencies	Rating			
Moody's	Aaa		32,343	0.16
Standard & Poors	AAA		30,915	0.15
Subtotal			\$ 176,856	\$ 0.86

Underwriting Spread	Amount	Per \$1,000
Takedown	1,304,060	6.33
Spread Expenses	42,227	0.20
Total	\$ 1,346,287	\$ 6.53

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	20,075	0.10	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Bank of America Merrill Lynch	No	58.00%	36.27%	473,048
Estrada Hinojosa & Co., Inc	HA	6.00%	2.87%	37,380
Fidelity Capital Markets	No	6.00%	6.24%	81,416
Frost Bank	No	6.00%	2.52%	32,886
FTN Financial Capital Markets	No	6.00%	3.25%	42,351
Jefferies & Company	No	6.00%	2.95%	38,501
Morgan Stanley	No	6.00%	43.55%	567,867
Ramirez & Co.	HA	6.00%	2.35%	30,612
Total		100.00%	100.00%	1,304,061

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Revenue Financing System Refunding Bonds, Series 2016C

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of campus improvements of certain members of the Revenue Financing System, (ii) refund certain long-term debt for savings, and (iii) pay the costs of issuance.

Par: \$133,240,000
Method of Sale: Negotiated
Negotiated Sale: May 1, 2016
Closing Date: May 10, 2016
Variable Rate: No
True Interest Cost (TIC): 1.39%
Net Interest Cost (NIC): 1.56%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	81,437	0.61
Printing	ImageMaster	No	1,743	0.01
Paying Agent	US Bank	No	3,500	0.03
Escrow Agent	US Bank	No	750	0.01
Escrow Verification	Grant Thornton	No	3,000	0.02
Dislosure Counsel	McCall, Parkhurst & Horton LLP	No	35,000	0.26
Attorney General		N/A	9,500	0.07
Miscellaneous		N/A	967	0.01
Rating Agencies	Rating			
Moody's	Aaa		31,500	0.24
Standard & Poors	AAA		50,750	0.38
Subtotal			\$ 218,147	\$ 1.64

Underwriting Spread	Amount	Per \$1,000
Takedown	329,316	2.47
Spread Expenses	32,908	0.25
Total	\$ 362,224	\$ 2.72

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	21,318	0.16	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Raymond James & Associates	No	60.00%	50.42%	166,041
Blaylock Beal Van, LLC	BA	10.00%	3.78%	12,454
Stifel, Nicolaus & Company, Inc	No	10.00%	27.94%	92,026
William Blair & Company, LLC	No	10.00%	13.63%	44,876
Drexel Hamilton	DV	10.00%	4.23%	13,919
Total		100.00%	100.00%	329,316

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Revenue Financing System Bonds, Series 2016D

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of campus improvements of certain members of the Revenue Financing System, and (ii) pay the costs of issuance.

Par: \$213,180,000
Method of Sale: Negotiated
Negotiated Sale: June 9, 2016
Closing Date: July 1, 2016
Variable Rate: No
True Interest Cost (TIC): 1.52%
Net Interest Cost (NIC): 1.73%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	105,569	0.50
Printing	ImageMaster	No	1,763	0.01
Paying Agent	Bank of Texas	No	3,200	0.02
Disclosure Counsel	McCall, Parkhurst & Horton LLP	No	15,000	0.07
Attorney General		N/A	9,500	0.04
Miscellaneous		N/A	1,500	0.01
Rating Agencies	Rating			
Moody's	Aaa		50,000	0.23
Standard & Poors	AAA		65,800	0.31
Subtotal			\$ 252,332	\$ 1.18

Underwriting Spread	Amount	Per \$1,000
Takedown	511,694	2.40
Spread Expenses	49,943	0.23
Total	\$ 561,637	\$ 2.63

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	27,500	0.13	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Citigroup Global Markets	No	60.00%	58.82%	300,969
BOSC	No	8.00%	2.12%	10,851
Hilltop Securities	No	8.00%	8.15%	41,681
JP Morgan	No	8.00%	20.16%	103,144
Estrada Hinojosa & Co., Inc.	HA	8.00%	1.22%	6,263
Loop Capital Markets	BA	8.00%	9.53%	48,786
Total		100.00%	100.00%	511,694

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

Issue: Board of Regents of The University of Texas System Revenue Financing System Bonds, Series 2016E

Purpose: Proceeds of the Bonds will be used to (i) finance the costs of campus improvements of certain members of the Revenue Financing System, and (ii) pay the costs of issuance.

Par: \$196,215,000
Method of Sale: Negotiated
Negotiated Sale: July 7, 2016
Closing Date: August 22, 2016
Variable Rate: No
True Interest Cost (TIC): 1.40%
Net Interest Cost (NIC): 1.61%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	101,425	0.52
Printing	ImageMaster	No	1,772	0.01
Paying Agent	Bank of Texas	No	3,200	0.02
Dislosure Counsel	McCall, Parkhurst & Horton LLP	No	15,000	0.08
Attorney General		N/A	9,500	0.05
Rating Agencies	Rating			
Moody's	Aaa		50,000	0.25
Subtotal			\$ 180,897	\$ 0.92

Underwriting Spread	Amount	Per \$1,000
Takedown	469,442	2.39
Spread Expenses	46,384	0.24
Total	\$ 515,826	\$ 2.63

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	27,500	0.14	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
RBC Capital Markets	No	60.00%	59.48%	279,207
Estrada Hinojosa & Co., Inc.	HA	8.00%	0.39%	1,813
Fidelity Capital Markets	No	8.00%	11.08%	52,000
George K. Baum & Company	No	8.00%	2.46%	11,535
Siebert, Cisneros, Shank & Co.	BA	8.00%	11.29%	52,993
Wells Fargo	No	8.00%	15.31%	71,894
Total		100.00%	100.00%	469,442

BOARD OF REGENTS OF THE UNIVERSITY OF HOUSTON SYSTEM

Issue: Board of Regents of The University of Houston System Consolidated Revenue and Refunding Bonds, Series 2016A

Purpose: Proceeds of the Bonds will be used to (i) acquire, purchase, construct, improve, enlarge or equip property, buildings, structures, activities, services, operations and other facilities, roads, or related infrastructure of the university system, (ii) refund or defease certain outstanding notes and bonds, (iii) pay capitalized interest, and (iv) pay the costs of issuance.

Par: \$100,650,000
Method of Sale: Competitive
Negotiated Sale: January 19, 2016
Closing Date: February 16, 2016
Variable Rate No
True Interest Cost (TIC): 2.79%
Net Interest Cost (NIC): 3.03%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Norton, Rose Fulbright LLP	No	61,929	0.62
Financial Advisor	First Southwest Company	No	58,544	0.58
OS Preparation		N/A	1,681	0.02
Paying Agent	Wells Fargo Bank	No	2,059	0.02
Escrow Agent	Wells Fargo Bank	No	530	0.01
Escrow Verification	Grant Thornton	No	1,059	0.01
Attorney General		N/A	9,500	0.09
Miscellaneous		N/A	5,000	0.05
Rating Agencies	Rating			
Moody's	Aa2		46,264	0.46
Standard & Poors	AA		27,546	0.27
Subtotal			\$ 214,112	\$ 2.13

Underwriting Spread	Amount	Per \$1,000
Management Fee	202,527	2.01
Takedown	234,787	2.33
Spread Expenses	17,111	0.17
Total	\$ 454,425	\$ 2.50

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Bank of America Merrill Lynch	No	100.00%	100.00%	234,787
Total		100.00%	100.00%	234,787

BOARD OF REGENTS OF THE UNIVERSITY OF HOUSTON SYSTEM

Issue: Board of Regents of The University of Houston System Consolidated Revenue and Refunding Bonds, Series 2016B

Purpose: Proceeds of the Bonds will be used to (i) acquire, purchase, construct, improve, enlarge or equip property, buildings, structures, activities, services, operations and other facilities, roads, or related infrastructure of the university system, (ii) refund or defease certain outstanding notes and bonds, (iii) pay capitalized interest, and (iv) pay the costs of issuance.

Par: \$184,350,000
Method of Sale: Competitive
Negotiated Sale: January 19, 2016
Closing Date: February 16, 2016
Variable Rate No
True Interest Cost (TIC): 3.13%
Net Interest Cost (NIC): 3.18%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	Norton, Rose Fulbright LLP	No	115,011	0.62
Financial Advisor	First Southwest Company	No	92,660	0.50
OS Preparation		N/A	3,079	0.02
Paying Agent	Wells Fargo Bank	No	2,941	0.02
Escrow Agent	Wells Fargo Bank	No	970	0.01
Escrow Verification	Grant Thornton	No	1,941	0.01
Attorney General		N/A	9,500	0.05
Miscellaneous		N/A	5,000	0.03
Rating Agencies	Rating			
Moody's	Aa2		84,736	0.46
Standard & Poors	AA		50,454	0.27
Subtotal			\$ 366,292	\$ 1.99

Underwriting Spread	Amount	Per \$1,000
Management Fee	414,556	2.25
Takedown	540,103	2.93
Spread Expenses	46,088	0.25
Total	\$ 1,000,747	\$ 3.18

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
Raymond James & Associates	No	100.00%	100.00%	540,103
Total		100.00%	100.00%	540,103

BOARD OF REGENTS OF THE UNIVERSITY OF NORTH TEXAS SYSTEM

Issue: Board of Regents of The University of North Texas System Revenue Financing System Refunding and Improvement Bonds, Series 2015A

Purpose: Proceeds of the Bonds will be used to (i) acquire, purchase, construct, improve, renovate, enlarge or equip property, buildings, structures, facilities, roads, or related infrastructure of the university system, (ii) current refund a portion of the Board's Series 2014 Bonds, (iii) refund a portion of the Board's outstanding commercial paper notes, and (iv) pay the costs of issuance.

Par: \$105,130,000
Method of Sale: Negotiated
Negotiated Sale: September 30, 2015
Closing Date: October 21, 2015
Variable Rate: No
True Interest Cost (TIC): 3.64%
Net Interest Cost (NIC): 4.01%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	67,775	0.64
Financial Advisor	First Southwest Company	No	54,840	0.52
Printing	ImageMaster	No	3,543	0.03
Paying Agent	Bank of New York Mellon	No	750	0.01
Attorney General		N/A	9,500	0.09
Miscellaneous		N/A	2,240	0.02
Rating Agencies	Rating			
Moody's	Aa2		62,548	0.59
Fitch	AA		47,206	0.45
Subtotal			\$ 248,402	\$ 2.36

Underwriting Spread	Amount	Per \$1,000
Takedown	377,404	3.59
Spread Expenses	59,340	0.56
Total	\$ 436,744	\$ 4.15

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	29,504	0.28	Underwriter
Co-Underwriter's Counsel	Mahomes Bolden PC	BA	14,752	0.14	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
JP Morgan	No	35.00%	54.96%	207,430
Jefferies & Company	No	16.25%	13.82%	52,156
Bardays Capital	No	16.25%	9.97%	37,624
Estrada Hinojosa & Co., Inc.	HA	16.25%	9.06%	34,202
Raymond James & Associates	No	16.25%	12.19%	45,992
Total		100.00%	100.00%	377,404

BOARD OF REGENTS OF THE UNIVERSITY OF NORTH TEXAS SYSTEM

Issue: Board of Regents of The University of North Texas System Revenue Financing System Refunding Bonds, Taxable Series 2015B

Purpose: Proceeds of the Bonds will be used to (i) current refund a portion of the Board's Series 2014 Bonds, (iii) refund a portion of the Board's outstanding commercial paper notes, and (iv) pay the costs of issuance.

Par: \$73,035,000
Method of Sale: Negotiated
Negotiated Sale: September 30, 2015
Closing Date: October 21, 2015
Variable Rate: No
True Interest Cost (TIC): 4.30%
Net Interest Cost (NIC): 4.44%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	48,510	0.66
Financial Advisor	First Southwest Company	No	38,099	0.52
Printing	ImageMaster	No	2,462	0.03
Paying Agent	Bank of New York Mellon	No	750	0.01
Attorney General		N/A	9,500	0.13
Miscellaneous		N/A	1,557	0.02
Rating Agencies	Rating			
Moody's	Aa2		43,453	0.59
Fitch	AA		32,794	0.45
Subtotal			\$ 177,125	\$ 2.43

Underwriting Spread	Amount	Per \$1,000
Takedown	242,603	3.32
Spread Expenses	42,083	0.58
Total	\$ 284,686	\$ 3.90

*Total Underwriting Spread includes Underwriter's Counsel fee

	Firm	HUB	Amount	Per \$1,000	Fees Paid By
Underwriter's Counsel	Andrews Kurth LLP	NA	20,496	0.28	Underwriter
Co-Underwriter's Counsel	Mahomes Bolden PC	BA	10,248	0.14	Underwriter

Syndicate Firms' Gross Takedown		Risk	Takedown	
Syndicate Member	HUB	%	% Amount	\$ Amount
JP Morgan	No	40.00%	39.92%	96,845
Morgan Stanley	No	20.00%	19.96%	48,423
Loop Capital Markets	BA	20.00%	20.16%	48,913
Wells Fargo	No	20.00%	19.96%	48,423
Total		100.00%	100.00%	242,604

BOARD OF REGENTS OF THE UNIVERSITY OF NORTH TEXAS SYSTEM

Issue: Board of Regents of The University of North Texas System Revenue Financing System Refunding Bonds, Series 2015C

Purpose: Proceeds of the Bonds will be used to (i) refund certain outstanding obligations, and (ii) pay the costs of issuance.

Par: \$45,865,000
Method of Sale: Private Placement
Private Sale: October 16, 2015
Closing Date: March 1, 2016
Variable Rate: No
True Interest Cost (TIC): 3.56%
Net Interest Cost (NIC): 3.87%

Issuance Costs	Firm	HUB	Amount	Per \$1,000
Bond Counsel	McCall, Parkhurst & Horton LLP	No	31,312	0.68
Financial Advisor	First Southwest Company	No	23,133	0.50
Escrow Agent	Bank of New York Mellon	No	750	0.02
Attorney General		N/A		0.00
Origination Fee	UMB Bank, NA	No	183,460	4.00
Private Placement Fee	Hutchinson, Shockey, Erley & Co.	No	5,000	0.11
Miscellaneous		N/A	16,345	0.36
Total			\$ 260,000	\$ 5.67

Appendix B

State Commercial Paper and Variable-Rate Note Programs

Several state agencies and institutions of higher education have established variable-rate debt financing programs that provide financing for equipment or capital projects or provide loans to eligible entities.

As of August 31, 2016, a total of \$7.71 billion was authorized for state commercial paper or variable-rate note programs. Of this amount, \$2.55 billion was outstanding as of the end of fiscal 2016 (*Table B1*), approximately \$33.2 million less than the amount outstanding at fiscal year-end 2015.

A brief summary of each commercial paper or variable-rate debt program is provided below.

Texas Department of Agriculture

In 1991, the Texas Agricultural Finance Authority (TAFA), a public authority within the Texas Department of Agriculture, was authorized to establish a taxable commercial paper note program. TAFA issues commercial paper to purchase and guarantee loans made to businesses involved in the production, processing, marketing and exporting of Texas agricultural products. The commercial paper notes are a general obligation of the state; however, the program is designed to be self-supporting.

During fiscal 1995, TAFA established a second general obligation taxable commercial paper note program to make funds available for the Farm and Ranch Finance Program. The program was established to provide loans and other financial assistance through local lending institutions to eligible borrowers for the purchase of farm or ranch land.

Texas Department of Housing and Community Affairs

The Texas Department of Housing and Community Affairs (TDHCA) established a single family mortgage revenue commercial paper program in 1994. The program enables TDHCA to capture mortgage payments and prepayments and recycle them into mortgage loans. By issuing commercial paper notes to satisfy the mandatory redemption

provisions of outstanding single family mortgage revenue bonds instead of using the payments and prepayments to redeem bonds, TDHCA is able to preserve the private activity volume cap and generate new mortgage loans.

While still legislatively authorized, the program was terminated in July 2009. TDHCA has no plans to use the authority, and reauthorization from the Bond Review Board (BRB) would be required to reestablish the program.

Texas Department of Transportation

In July 2005, the Texas Transportation Commission (the Commission), the governing body of the Texas Department of Transportation, authorized a commercial paper program to issue up to \$500.0 million in commercial paper to carry out transportation functions.

In June 2013, the Commission suspended the commercial paper program and created the State Highway Fund Revenue Flexible Rate Revolving Notes Program in an aggregate par amount not to exceed \$750.0 million to carry out transportation functions.

Texas Economic Development and Tourism Office

In 1992, the Department of Commerce, subsequently the Texas Economic Development and Tourism Office (the "Office") was granted \$300.0 million of authority to issue commercial paper to fund loans to Texas businesses under three programs. Under the first program marketed as the Texas Leverage Fund, the Office approves loans to local industrial development corporations. Revenues from an optional local half-cent sales tax for economic development secure these loans. The second program provides for the purchase of small business loans which are fully guaranteed by the U.S. Small Business Administration. A third program may make loans directly to businesses from program reserves. The program is designed to be self-supporting, and the commercial paper issued by the Office is taxable. The BRB has authorized a

Table B1
TEXAS COMMERCIAL PAPER AND VARIABLE-RATE NOTE PROGRAMS
as of August 31, 2016

ISSUER	TYPE OF PROGRAM	AMOUNT AUTHORIZED	AMOUNT ISSUED FISCAL 2016	AMOUNT OUTSTANDING
Texas Department of Agriculture ⁽¹⁾				
TAFSA	Commercial Paper - Series A	\$ 50,000,000	\$ -	\$ 5,250,000
Farm and Ranch Loans	Commercial Paper - Series B	25,000,000	-	-
Texas Dept. of Housing & Community Affairs	Commercial Paper	-	-	-
Texas Department of Transportation				
State Highway Fund	Commercial Paper - Series A	500,000,000	-	-
State Highway Fund	Flexible-Rate Notes	750,000,000	400,000,000	-
Texas Economic Dev & Tourism Office ⁽²⁾	Commercial Paper	25,000,000	-	20,000,000
Texas Public Finance Authority				
Revenue	Commercial Paper - 2003	150,000,000	11,125,000	44,480,000
General Obligation	Commercial Paper - 2002A	881,000,000	-	-
General Obligation	Commercial Paper - 2002B	175,000,000	-	-
General Obligation	Commercial Paper - 2008	1,000,000,000	55,800,000	132,660,000
General Obligation - Cancer Prevention	Commercial Paper - Series A	450,000,000	207,500,000	152,100,000
Research Institute of Texas ⁽³⁾	Commercial Paper - Series B		-	-
Texas Tech University System				
Revenue Financing System	Commercial Paper	150,000,000	34,800,000	52,096,000
The Texas A&M University System				
Permanent University Fund	Flexible-Rate Notes	125,000,000	-	-
Permanent University Fund	Commercial Paper		68,000,000	53,300,000
Revenue Financing System	Commercial Paper	300,000,000	140,000,000	125,662,000
The University of Texas System				
Permanent University Fund	Flexible-Rate Notes	400,000,000	-	-
Permanent University Fund ⁽³⁾	Commercial Paper - Series A	750,000,000	400,000,000	400,000,000
Permanent University Fund ⁽³⁾	Commercial Paper - Series B		102,500,000	225,000,000
Revenue Financing System ⁽³⁾	Commercial Paper - Series A		250,000,000	1,109,115,000
Revenue Financing System ⁽³⁾	Commercial Paper - Series B	1,750,000,000	152,000,000	152,000,000
University of Houston System				
Revenue Financing System	Commercial Paper	125,000,000	32,150,000	54,472,000
University of North Texas System				
Revenue Financing System	Commercial Paper	100,000,000	20,298,000	20,150,000
Total		\$ 7,706,000,000	\$ 1,874,173,000	\$ 2,546,285,000

Source: Texas Bond Review Board - Bond Finance Office.

⁽¹⁾ Represents the maximum amount authorized by the Bond Review Board; however, the Texas Agricultural Finance Authority (Department of Agriculture) has approved a \$100 million program amount.

⁽²⁾ Represents the maximum amount authorized by the Bond Review Board; however, the program has a \$300 million program amount.

⁽³⁾ Represents cumulative total amount for Series A (tax-exempt) & B (taxable) with no limitation on the amount issued in each series, provided that the total outstanding amount will not exceed the maximum authorization.

maximum authority of \$25.0 million for the Texas Leverage Fund.

Texas Public Finance Authority

In 1992, the Texas Public Finance Authority (TPFA) established a Master Lease Purchase Program (MLPP) that is funded through

commercial paper. The commercial paper issued to date has primarily been used to finance the purchase of equipment with shorter useful lives such as computers and telecommunications equipment. TPFA also has the authority to use the commercial paper to provide interim financing for capital projects undertaken on behalf of state agencies. The MLPP commercial paper is a special

revenue obligation of the state, payable only from legislative appropriations to the participating agencies for lease payments.

During fiscal 1993, TPFA established a variable-rate financing program that is secured by the state's general obligation pledge. The proceeds are used to provide interim financing for capital projects that are authorized by the legislature and financed through general obligation bonds. In 2002, TPFA established a commercial paper program that is also secured by the state's general obligation pledge to provide financial assistance to border counties for roadways in colonias.

In 2008, TPFA established another commercial paper program that is also secured by the state's general obligation pledge to: (i) provide interim financing for maintenance, improvement, repair, construction and equipment-acquisition projects for state agencies, (ii) refund and refinance the Notes, and (iii) pay the costs of issuance of the Notes.

In the November 2007 general election, Texas voters authorized TPFA to issue \$3.00 billion of general obligation debt over ten years to finance cancer research. During fiscal 2009, TPFA established a commercial paper program that is also secured by the state's general obligation pledge to provide financing of certain projects for the Cancer Prevention and Research Institute of Texas. The first issuance occurred in September 2009.

Texas Tech University System and Texas Tech University Health Sciences Center

In November 1997, the Board of Regents of Texas Tech University System (the "TTU System") authorized a Revenue Financing System commercial paper program to provide interim financing for capital projects, including construction, acquisition, renovation and equipment for facilities of the TTU System. The commercial paper is secured by a pledge of all legally available revenues of the TTU System, including pledged tuition fees, general fees and other revenue sources.

The Texas A&M University System

The Texas A&M University System (the "A&M System") has authorized three variable-rate financing programs: a flexible-rate note program and a commercial paper program both secured by the Permanent University Fund (PUF), as well as a commercial paper program secured by the A&M System revenues. The A&M System's PUF flexible-rate note program and the PUF commercial paper program were established in 1988 and 2008, respectively, to provide interim financing and equipping of facilities for eligible construction projects. The A&M System's total outstanding PUF commercial paper notes and flexible-rate notes may not exceed \$125.0 million in principal amount at any time.

The A&M System's Revenue Financing System (RFS) Commercial Paper Program was established in 1992 to provide interim financing for capital projects, including construction, acquisition, and renovation or equipping of facilities throughout the A&M System. Outstanding RFS commercial paper may not exceed \$300.0 million in principal amount at any time and is secured by a pledge of all legally available revenues to the A&M System, including pledged tuition revenue and fees, general fees and other revenue sources. The A&M System has a self-liquidity facility for this program.

The University of Texas System

The University of Texas System (the "UT System") has two primary interim financing programs: a Revenue Financing System (RFS) commercial paper program and a Permanent University Fund (PUF) commercial paper note program, both of which feature both taxable and tax-exempt commercial paper options.

The UT System's RFS commercial paper note program was established in 1990 to provide interim financing for capital projects, including construction, acquisition and renovation or equipping of facilities. RFS commercial paper notes are secured by a pledge of all legally available revenues of the UT System, including pledged tuition fees, general fees and other revenue sources. The UT System's aggregate amount of outstanding

RFS commercial paper notes may not exceed \$1.75 billion in principal amount at any time.

The UT System's PUF commercial paper note program was established in 2008 to replace a previously authorized \$400 million PUF flexible-rate note program. The UT System expects to utilize the PUF commercial paper note program as its primary short-term financing vehicle for PUF-related projects but will maintain the flexible-rate note program. PUF commercial paper notes provide interim financing for eligible capital projects, including construction, acquisition and renovation or equipping of facilities. PUF commercial paper notes are secured by the UT System's share of distributions from the total return on all PUF investments. The UT System's outstanding PUF commercial paper notes may not exceed \$750million in principal amount at any time.

University of Houston System

In August 2006, the Board of Regents of the University of Houston System (the "UH System") authorized a Revenue Financing System commercial paper program. The program was established to provide interim financing for capital projects, including construction, acquisition, renovation and equipment for facilities of the UH System. The commercial paper is secured by a pledge of all legally available revenues of the UH System, including pledged tuition fees, general fees and other revenue sources.

University of North Texas System

In May 2004, the Board of Regents of the University of North Texas System (the "UNT System") authorized a Revenue Financing System commercial paper program in an initial amount not to exceed \$50.0 million. The program was established to provide interim financing for capital projects, including construction, acquisition, renovation and equipment for facilities of the UNT System. The commercial paper is secured by a pledge of all legally available revenues of the UNT System, including pledged tuition fees, general fees and other revenue sources. In fiscal 2008, the commercial paper program was increased to an

amount not to exceed \$100.0 million of which \$25.0 million may be issued as taxable notes.

Other State Issuers of Variable-Rate Debt

Several other state issuers have the authority to issue debt in variable-rate form. State issuers may utilize variable-rate debt in order to diversify their debt portfolio and to take advantage of lower short-term interest rates as available.

The Veterans Land Board is one example of a state issuer that has issued variable-rate housing assistance bonds to diversify its debt portfolio. Similarly, the Texas Water Development Board is authorized to issue subordinate-lien variable-rate demand revenue bonds as part of the State Revolving Fund program.

Comptroller of Public Accounts Liquidity Facility Provider Duties

The 73rd Legislature passed legislation that authorized the Comptroller of Public Accounts - Treasury Operations to enter into agreements to provide liquidity for obligations issued for governmental purposes by an agency of the state as long as the agreements did not conflict with the liquidity needs of the Treasury. Eligible obligations include commercial paper, variable-rate demand obligations and bonds.

Pursuant to Section 404.027 of the Texas Government Code, the Comptroller may enter into agreements to provide liquidity for agency obligations issued for governmental purposes if it does not conflict with the Treasury's liquidity needs. For fiscal year 2016, the Comptroller of Public Accounts - Treasury Operations provided daily liquidity commitments totaling \$506.8 million out of a total of \$866.5 million in such commitments for state obligations.

Appendix C

State Issuers' Use of Swaps

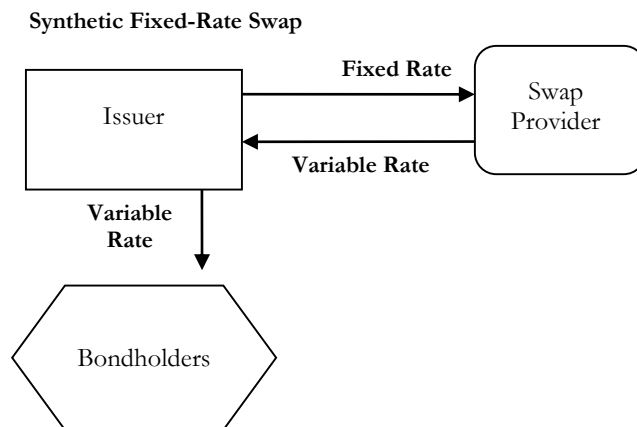
Interest rate swaps are part of a larger class of financial instruments called derivatives whose value is based on the performance of an underlying financial asset, index or other investment. While a variety of derivative products are available, Texas issuers most often use interest rate swaps. Swaps are primarily used as tools for financial management to reduce interest expense and hedge against interest-rate, tax, basis and other risks described below. Swaps can also increase financial flexibility and are used to achieve objectives consistent with the issuer's overall program goals and financial policies. See *Table C1* for the total number of swaps outstanding by issuer at August 31, 2016.

Swaps Used by State Issuers

An interest rate swap is created when a debt issuer and a financial institution, each referred to as a counterparty, enter into a contract to exchange interest payments. The types of swaps most often utilized by Texas issuers are pay-fixed, receive-variable and pay-variable, receive-variable (basis) interest rate swaps. As of August 31, 2016, pay-fixed, receive-variable swaps comprised approximately 81.6 percent of the state's \$4.51 billion in total notional amount of swaps outstanding. The balance were basis swaps.

Pay-fixed, receive-variable swap (synthetic fixed-rate swap)

By accepting certain risks with pay-fixed, receive-variable swaps, issuers may be able to lower their borrowing costs compared to issuing traditional, fixed-rate bonds. Under this arrangement which creates *synthetic fixed-rate debt*, the issuer agrees to make fixed-rate payments to the swap counterparty and the swap counterparty agrees to pay the issuer variable, index-based rate payments that are expected to be comparable to the rates payable on the variable-rate debt associated with the swap agreement. This swap program is illustrated below.



To structure such a transaction, issuers must analyze the impact of issuing either natural or synthetic fixed-rate debt. If the spread between the two is sufficient to compensate the issuer for accepting certain risks associated with synthetic fixed-rate debt, the issuer will execute the swap and issue the associated variable-rate debt. The issuer remains obligated to make debt-service payments to the variable-rate bond holders, even if the variable-rate payment received from the swap counterparty does not cover the variable-rate payment due on the associated bonds (see discussion on Basis Risk).

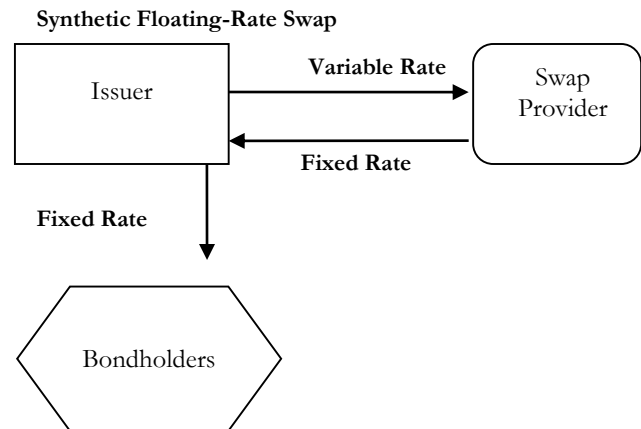
The variable rates received under most of the state's pay-fixed, receive-variable interest rate swaps are based on the tax-exempt Securities Industries and Financial Market Association Swap Index (SIFMA), formerly known as the BMA Swap Index produced by Municipal Market Data. Certain other of the state's pay-fixed, receive-variable interest rate swaps are based on the London Interbank Offered Rates (LIBOR) taxable rate index.

During fiscal 2009 two pay-fixed, receive-variable swap contracts, associated with the Veterans Land Board (VLB) Veterans' Housing Assistance Program, Fund II Series 2004A and 2005B Bonds were terminated as a result of the bankruptcy of Lehman Brothers and are now classified as variable-rate debt. No

swap contracts were terminated in fiscal 2010, but during fiscal 2011 VLB exercised its option to terminate its only synthetic floating rate swap due to the contract's favorable fair market value. During fiscal 2013, VLB added a pay-fixed, receive-variable swap contract to its Series 2012B and Series 2013A bonds with notional amounts of \$100.0 million each and its Series 2013B bonds with a notional amount of \$150.0 million. In fiscal 2014 the VLB added a pay-fixed, receive-variable swap contract to its Series 2014A bonds with a notional amount of \$150.0 million. In fiscal 2015 the VLB added three pay-fixed, receive-variable swap contracts to its Series 2014D, 2015A and 2015B bonds with notional amounts of \$100.0 million, \$125.0 million and \$125.0 million, respectively. Additionally, in fiscal 2016 the VLB added one pay-fixed, receive-variable swap contracts to its Series 2016 in a notional amount of \$250.0 million. The University of Texas System added a pay-fixed, receive-variable forward swap to its RFS Series 2016 bonds effective in fiscal 2017 with a notional amount of \$250.0 million.

Pay-variable, receive-fixed swap (synthetic floating-rate swap)

Conversely, *synthetic floating-rate debt* is created when the issuer sells fixed-rate debt and enters into a fixed-to-floating rate swap. The issuer agrees to pay variable-rate payments to the counterparty and in exchange receives a fixed-rate payment from the swap counterparty. As with synthetic fixed-rate debt, the rate to be paid is tied to an underlying reference index such as the *taxable* LIBOR or the *tax-exempt* SIFMA Index. This swap program is illustrated below.



As of August 31, 2016 no synthetic floating-rate swaps were outstanding.

Pay-variable, receive-variable swap (basis swap)

The pay-variable, receive-variable swaps (called *basis* swaps) are LIBOR-to-SIFMA basis swaps that effectively convert the variable rate on the associated taxable variable-rate bond issues from a *taxable* LIBOR-based rate to a *tax-exempt* SIFMA-based rate.

As of August 31, 2016, basis swaps comprised approximately 18.4 percent of the state's total notional amount of swaps outstanding. No basis swap contracts were executed during fiscal 2016.

As of January 31, 2013, Texas Department of Transportation terminated its three basis swap agreements with JP Morgan, Goldman Sachs and Morgan Stanley, respectively.

Risk Analysis

State issuers considering entering into an interest-rate swap agreement must assess the risks associated with the transaction. Some issuers include contractual limitations or options that assist in reducing those risks. For example, the VLB has the option to terminate its swap agreements at any time. Generally, the

risks associated with interest rate swaps fall into the following categories:

Termination Risk – the risk that an interest rate swap could be terminated prior to its scheduled termination date as a result of any of several events relating to either the issuer or its counterparty. The issuer or the counterparty may terminate a swap if the other party fails to perform under the terms of the swap agreement. If a swap has a negative fair value, the issuer would owe the respective counterparty a termination payment equal to the swap's fair value at the time of termination (see discussion on Fair Value).

Credit Risk – the risk that either the counterparty or the issuer will not fulfill its obligations specified by the terms of the swap agreement. State issuers mitigate this risk by entering into transactions with highly-rated counterparties. The issuers also mitigate concentrations of credit risk by diversifying their swap portfolios among different counterparties. Credit risk also includes the risk of the occurrence of an event that would modify the credit rating of an issuer or its counterparty.

Basis Risk – the risk of a shortfall between the interest payment received and the interest payment paid on the related debt issue. An issuer mitigates this risk by: 1) matching the swap's notional amount and amortization schedule to the associated bond issue's principal amount and amortization schedule and 2) selecting a variable-rate leg for the swap that is reasonably expected to match the interest rate on the associated variable-rate bonds over the life of the bond issue.

Rollover Risk – the risk associated with the counterparty's option to terminate the swap. If the swap is terminated by the counterparty, the associated variable-rate bonds would no longer have a synthetic fixed rate and would be subject to interest-rate risk to the extent the variable-rate bonds were not hedged with another swap

or with variable-rate assets on the issuer's balance sheet.

Tax Risk – the risk associated with potential changes in the taxation of the issuer's tax-exempt, variable-rate bonds as a result of changes in marginal income tax rates and other changes in the federal and state tax systems.

Fair Value – the value of a swap estimated by using market-standard practice that includes a calculation of future net settlement payments required by the swap based on market expectations implied by the current yield curve for interest rate transactions. For a swap with embedded options, additional calculations are made to determine the value of the options.

When the fair value of a swap is positive, the counterparty is liable to the issuer for the fair value in the event of termination of the swap. In this instance the issuer is exposed to counterparty credit risk; however, issuer swap agreements contain varying collateral agreements and insurance policies with counterparties to mitigate credit risk.

Due to the general reduction in interest rates over the last several years, the net fair value of the state's outstanding swaps was negative at August 31, 2016, indicating that Texas swap issuers would be liable for payments to the counterparty for the fair values of the swaps in the unlikely event of termination. However, it is important to note that issuers have achieved significant savings in interest costs by use of interest rate swaps. (See *Table C2* for the terms, counterparty credit ratings and fair values for the state's swaps outstanding by issuer at August 31, 2016.)

Additional Derivative Products

In addition to interest rate swaps, additional derivative products used by Texas issuers include the following:

Options on swaps – sale or purchase of options to commence or cancel interest rate swaps.

Several of the VLB swaps contain embedded options called barrier options that provide for the VLB to be "knocked out" of the swaps by the respective counterparties for varying periods of time upon the breach of certain predetermined barriers. In each of these cases, the respective counterparties paid the VLB an up-front premium for the option.

Interest rate caps – financial contracts called caps, collars or floors limit or bound exposure to interest rate volatility.

Rate locks – rate locks are often based on interest rate swaps and may be used to hedge against a rise in interest rates for an upcoming fixed-rate bond issue.

Management Policy

State issuers with swap transactions outstanding or those issuers contemplating entering into swap agreements have adopted derivative or swap-management policies outlining the objectives, management, oversight,

monitoring, selection and restrictions for their derivative or swap agreements.

With the passage of Senate Bill 1332 during the 80th Legislature, the Bond Review Board's (BRB) statutes were modified to add a definition of interest rate management (derivative) agreements and to require the BRB to develop a related policy. In fiscal 2009 the BRB engaged a swap advisor to assist with the development of a state interest rate management policy and analysis of interest rate management agreements. This policy can be found on the agency's website.

In fiscal 2010 the BRB amended its administrative rules to require issuers that enter into derivative agreements to submit additional information for staff review including a copy of all schedules to the Master Agreement and/or the Credit Support Annex and transaction confirmations. Additionally, issuers must notify the Bond Review Board within 10 days of material adverse changes involving the parties to derivative agreements.

Table C1 NOTIONAL AMOUNTS - INTEREST RATE SWAPS As of August 31, 2016 (Unaudited) (amounts in thousands)				
	Original Notional Amount	Current Notional Amount	Current Fair Value	Total # of Swaps
<u>Veterans Land Board</u>				
Pay-Fixed, Receive-Variable Total	\$3,095,540	\$2,345,555	-\$348,529	53
Pay-Variable, Receive-Variable Total	71,630	61,210	330	2
TOTAL VLB	\$3,167,170	\$2,406,765	-\$348,199	55
<u>Texas Department of Housing and Community Affairs</u>				
Pay-Fixed, Receive-Variable Total	\$331,005	\$128,765	-\$17,298	4
TOTAL TDHCA	\$331,005	\$128,765	-\$17,298	4
<u>The University of Texas System</u>				
Pay-Fixed, Receive-Variable Total	\$1,681,851	\$1,207,675	-\$404,869	8
Pay-Variable, Receive-Variable Total	781,683	768,650	20,179	5
TOTAL UTS	\$2,463,534	\$1,976,325	-\$384,690	13
<u>Totals</u>				
Pay-Fixed, Receive-Variable	\$5,108,396	\$3,681,995	-\$770,696	65
Pay-Variable, Receive-Variable	853,313	829,860	20,509	7
TOTAL INTEREST RATE SWAPS	\$5,961,709	\$4,511,855	-\$750,187	72
Source: Texas Bond Review Board - Bond Finance Office.				

Table C2 VETERANS LAND BOARD - INTEREST RATE SWAPS As of August 31, 2016 (Unaudited) (amounts in thousands)								
PAY-FIXED, RECEIVE VARIABLE								
(Synthetic Fixed Rate)								
Bond Issue	Original Notional Amount	Current Notional Amount	Effective Date	Swap Termination Date	Fixed-Rate Paid	Variable-Rate Received	Counterparty Credit Ratings	Current Fair Value
Vet Hsg Ref Bds Ser '95	\$88,490	\$8,945	11/29/1995	12/01/2016	5.52%	Actual Bond Rate	A- / Baa1	0
Vet Land Ref Bds Ser '99A	40,025	10,325	06/01/1999	12/01/2018	5.11%	68% of 6M LIBOR	A- / Baa1	-677
Vet Hsg Fund II Bds Ser 2001A-2	20,000	20,000	12/03/2001	12/01/2029	4.30%	68% of 1M LIBOR	BBB+ / Baa1	-5,851
Vet Hsg Fund II Bds Ser 2001C-2	25,000	24,640	12/18/2001	12/01/2033	4.37%	68% of 1M LIBOR	AA- / Aa2	-9,339
Vet Land Bds Ser 2002	20,000	14,400	02/21/2002	12/01/2032	4.14%	68% of 1M LIBOR	BBB+ / A3	-3,983
Vet Hsg Fund II Bds Ser 2002A-2	38,300	23,570	07/10/2002	06/01/2033	3.87%	68% of 1M LIBOR	A+ / Aa3	-7,646
Vet Hsg Fund II Bds Ser 2003A	50,000	24,775	03/04/2003	06/01/2034	3.30%	68% of 1M LIBOR	A+ / Aa3	-4,548
Vet Hsg Fund II Bds Ser 2003B	50,000	26,035	12/01/2003	06/01/2034	3.40%	100% of 6M LIBOR	AA- / Aa2	-4,693
Vet Hsg Fund II Bds Ser 2004B	50,000	28,625	09/15/2004	12/01/2034	3.68%	100% of 6M LIBOR	A+ / Aa3	-6,357
Vet Hsg Fund II Bds Ser 2005A	50,000	28,215	02/24/2005	06/01/2035	3.28%	68% of 1M LIBOR	AA- / Aa2	-5,407
Vet Hsg Fund II Bds Ser 2006A	50,000	30,370	06/01/2006	12/01/2036	3.52%	100% of 6M LIBOR	AA- / Aa3	-7,034
Vet Hsg Fund II Bds Ser 2006D	50,000	31,980	03/26/2008	12/01/2036	3.69%	68% of 1M LIBOR	A / A1	-7,898
Vet Hsg Fund II Bds Ser 2007A	54,160	32,085	02/22/2007	06/01/2037	3.65%	100% of 1M LIBOR	AA- / Aa2	-8,112
Vet Hsg Fund II Bds Ser 2007B	50,000	33,930	06/26/2007	06/01/2038	3.71%	68% of 1M LIBOR	AA- / Aa3	-8,578
Vet Hsg Fund II Bds Ser 2008A	50,000	33,800	03/26/2008	12/01/2038	3.19%	68% of 1M LIBOR	A+ / Aa3	-7,225
Vet Hsg Fund II Bds Ser 2008B	50,000	34,955	09/11/2008	12/01/2038	3.23%	68% of 1M LIBOR	AA- / Aa2	-7,788
Vet Hsg Ser 2010C	74,995	60,870	08/20/2010	12/01/2040	2.31%	68% of 1M LIBOR	BBB+ / A3	-7,520
Vet Hsg Ser 2011A	74,995	60,790	03/09/2011	06/01/2041	2.68%	68% of 1M LIBOR	BBB+ / Baa2	-9,698
Vet Hsg Ser 2011B	74,995	62,060	08/25/2011	12/01/2041	2.37%	68% of 1M LIBOR	BBB+ / Baa2	-8,096
Vet Hsg Ser 2011C	74,995	63,235	12/15/2011	06/01/2042	1.92%	68% of 3M LIBOR	AA- / Aa2	-5,370
Vet Hsg Ser 2012A	74,995	63,540	07/01/2012	12/01/2042	1.69%	68% of 3M LIBOR	AA- / Aa2	-3,895
Vet Hsg Ser 2012B	100,000	85,720	11/01/2012	12/01/2042	1.45%	68% of 3M LIBOR	AA- / Aa2	-3,148
Vet Hsg Ser 2013A	99,995	90,350	03/20/2013	06/01/2043	1.70%	68% of 3M LIBOR	AA- / Aa2	-5,836
Vet Hsg Ser 2013B	149,995	136,035	08/23/2013	12/01/2043	2.15%	68% of 1M LIBOR	AA- / Aa2	-16,204
Vet Hsg Tax Ref Bds Ser 2013C	39,560	36,035	12/01/2006	12/01/2026	5.46%	100% of 6M LIBOR	A+ / Aa3	-8,959
Vet Hsg Tax Ref Bds Ser 2013C	50,000	27,000	12/01/2007	06/01/2029	4.66%	100% of 1M LIBOR	A+ / Aa3	-9,226
Vet Hsg Tax Ref Bds Ser 2013C	16,950	10,195	12/01/2009	12/01/2021	6.22%	100% of 6M LIBOR	A+ / Aa3	-1,506
Vet Hsg Tax Ref Bds Ser 2013C	65,845	56,800	12/01/2009	06/01/2031	5.45%	100% of 6M LIBOR	A+ / Aa3	-17,594
Vet Hsg Ser 2014A	150,000	140,320	02/27/2014	06/01/2044	2.18%	68% of 1M LIBOR	AA- / Aa2	-17,420
Vet Hsg Fund I Tax Ref Bds Ser 2014B-1	47,865	30,200	12/01/2003	06/01/2021	5.19%	100% of 6M LIBOR	AA- / Aa2	-3,023
Vet Hsg Fund I Tax Ref Bds Ser 2014B-1	50,000	15,320	06/01/2004	12/01/2024	5.45%	100% of 6M LIBOR	A+ / Aa3	-2,868
Vet Hsg Fund II Tax Ref Bds Ser 2014B-1 & B-2	43,870	28,165	12/01/2004	06/01/2020	5.35%	100% of 1M LIBOR	A+ / Aa3	-2,489
Vet Hsg Fund I Tax Ref Bds Ser 2014B-1	19,860	11,000	12/01/2005	12/01/2023	4.93%	100% of 1M LIBOR	A+ / Aa3	-1,767
Vet Hsg Fd I/II Tax Ref Bds Ser 2014B-1 & C-2	24,885	19,510	12/01/2005	06/01/2026	5.15%	100% of 1M LIBOR	A+ / Aa3	-4,209
Vet Land Tax Ref Bds Ser 2014B-3	39,960	23,325	12/01/2000	12/01/2020	6.11%	100% of 6M LIBOR	AA- / Aa2	-2,877
Vet Land Tax Ref Bds Ser 2014B-3	22,795	16,450	12/01/2005	12/01/2026	6.52%	100% of 6M LIBOR	A+ / Aa3	-4,657
Vet Hsg Fund I Tax Ref Bds Ser 2014C-1	22,605	14,590	12/01/2002	06/01/2023	4.91%	100% of 6M LIBOR	AA- / Aa2	-1,973
Vet Hsg Fund I Tax Ref Bds Ser 2014C-1	21,795	19,825	08/01/2012	12/01/2033	3.76%	68% of 1M LIBOR	AA- / Aa3	-5,711
Vet Hsg Fund II Tax Ref Bds Ser 2014C-2	38,570	35,080	06/01/2006	12/01/2026	5.83%	100% of 1M LIBOR	A+ / Aa3	-9,170
Vet Hsg Fund II Tax Ref Bds Ser 2014C-2	22,325	15,915	06/01/2006	12/01/2027	5.79%	100% of 6M LIBOR	A+ / Aa3	-4,138
Vet Hsg Fund II Tax Ref Bds Ser 2014C-2	66,720	57,620	06/01/2010	12/01/2031	5.40%	100% of 1M LIBOR	A+ / Aa3	-20,930
Vet Hsg Fund II Tax Ref Bds Ser 2014C-2	49,995	34,470	12/01/2010	06/01/2032	2.79%	100% of 1M LIBOR	AA- / Aa2	-3,273
Vet Land Tax Ref Bds Ser 2014C-3	50,000	21,900	06/01/2006	12/01/2027	6.54%	100% of 6M LIBOR	A+ / Aa3	-6,869
Vet Land Tax Ref Bds Ser 2014C-3	16,480	13,915	12/01/2010	12/01/2030	5.21%	100% of 1M LIBOR	A+ / Aa3	-4,377
Vet Land Tax Ref Bds Ser 2014C-4	27,685	20,525	12/01/2002	12/01/2021	4.94%	100% of 6M LIBOR	BBB+ / A3	-2,695
Vet Land Tax Ref Bds Ser 2014C-4	50,000	15,510	12/01/2003	12/01/2023	5.12%	100% of 1M LIBOR	A+ / Aa3	-2,523
Vet Land Tax Ref Bds Ser 2014C-4	24,755	17,570	12/01/2004	12/01/2024	5.46%	100% of 6M LIBOR	BBB+ / A3	-3,269
Vet Land Tax Ref Bds Ser 2014C-4	31,030	18,260	06/01/2006	12/01/2026	4.61%	100% of 6M LIBOR	AA- / Aa2	-3,181
Vet Land Tax Ref Bds Ser 2014C-4	41,050	28,775	12/01/2006	12/01/2027	6.51%	100% of 1M LIBOR	A+ / Aa3	-9,475
Vet Hsg Ser 2014D	100,000	95,385	09/10/2014	06/01/2045	1.94%	68% of 1M LIBOR	AA- / Aa2	-9,524
Vet Hsg Ser 2015A	125,000	119,595	02/11/2015	06/01/2045	1.51%	68% of 1M LIBOR	BBB+ / Baa2	-6,735
Vet Hsg Ser 2015B	125,000	123,345	07/22/2015	06/01/2046	1.77%	68% of 1M LIBOR	AA- / Aa2	-10,641
Vet Hsg Ser 2016	250,000	249,705	12/01/2016	12/01/2046	1.56%	68% of 1M LIBOR	AA- / Aa2	-12,551
Pay-Fixed, Receive-Variable Total	\$3,095,540	\$2,345,555						-\$348,529
PAY-VARIABLE, RECEIVE-VARIABLE								
(Basis Swap)								
Bond Issue	Original Notional Amount	Current Notional Amount	Effective Date	Swap Termination Date	Variable-Rate Paid	Variable-Rate Received	Counterparty Credit Ratings	Current Fair Value
Vet Land Tax Ref Bds Ser 2014C-3	\$40,000	\$29,580	08/05/2002	12/01/2032	131.25% of SIFMA	100.00% of 1M LIBOR	BBB+ / A3	-292
Vet Hsg Fund II Bds Ser 2009A	31,630	31,630	03/05/2009	12/01/2023	100.00% of SIFMA	94.35% of 3M LIBOR	AA+ / Aa2	622
Pay-Variable, Receive-Variable Total	\$71,630	\$61,210						\$330
TOTAL VLB INTEREST RATE SWAPS	\$3,167,170	\$2,406,765						-\$348,199
Source: Texas Bond Review Board - Bond Finance Office.								

Table C2 (continued)								
TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS - INTEREST RATE SWAPS								
As of August 31, 2016 (Unaudited)								
(amounts in thousands)								
PAY-FIXED, RECEIVE VARIABLE (Synthetic Fixed Rate)	Original	Current	Swap		Fixed-Rate Paid	Variable-Rate Received	Counterparty Credit Ratings	Current Fair Value
	Notional Amount	Notional Amount	Effective Date	Termination Date				
Bond Issue								
TDHCA SF Variable Rate Ref MRB Ser 2004B	\$53,000	\$33,530	09/01/2004	09/01/2034	3.67%	65.5% of LIBOR + .20%	AA-/Aa2/AA	-3,414
TDHCA SF Variable Rate MRB Ser 2004D	35,000	25,700	01/01/2005	03/01/2035	3.08%	*	A/A1/A+	-1,987
TDHCA SF Variable Rate Ref MRB Ser 2005A	100,000	31,130	08/01/2005	09/01/2036	4.01%	*	A+/Aa3/AA-	-5,881
TDHCA SF Variable Rate Ref MRB Ser 2007A	143,005	38,405	06/05/2007	09/01/2038	4.01%	*	A+/Aa3/AA-	-6,016
TOTAL TDHCA INTEREST RATE SWAPS	\$331,005	\$128,765						-\$17,298
* Lessor of (a) or (b) where (a) equals the greater of (i) 65% X LIBOR or (ii) 56% X LIBOR + .45% and b) equals 1M LIBOR.								
** TDHCA is not a party to the Multifamily swap agreements and therefore is not required to report market value on financial statements.								
Source: Texas Bond Review Board - Bond Finance Office.								

THE UNIVERSITY OF TEXAS - INTEREST RATE SWAPS								
As of August 31, 2016 (Unaudited)								
(amounts in thousands)								
PAY-FIXED, RECEIVE VARIABLE (Synthetic Fixed Rate)	Original	Current	Swap		Fixed-Rate Paid	Variable-Rate Received	Counterparty Credit Ratings	Current Fair Value
	Notional Amount	Notional Amount	Effective Date	Termination Date				
Bond Issue								
UT RFS Refunding Bonds, Series 2007B-1	\$172,730	\$164,490	12/20/2007	08/01/2034	3.81%	SIFMA	A+/Aa3	-49,287
UT RFS Refunding Bonds, Series 2007B-2	172,730	164,490	12/20/2007	08/01/2034	3.81%	SIFMA	AA-/Aa2	-49,243
UT RFS Bonds, Series 2008B-1	155,000	123,950	03/18/2008	08/01/2036	3.90%	SIFMA	A+/Aa3	-39,455
UT RFS Bonds, Series 2008B-2	375,485	260,635	03/18/2008	08/01/2039	3.61%	SIFMA	A+/Aa3	-68,503
UT RFS Bonds, Series 2008B-3	155,000	123,950	03/18/2008	08/01/2036	3.90%	SIFMA	BBB+/A3	-39,354
UT PUF Bonds, Series 2008A-1	200,453	185,080	11/03/2008	07/01/2038	3.70%	SIFMA	AA-/Aa2	-68,047
UT PUF Bonds, Series 2008A-2	200,453	185,080	11/03/2008	07/01/2038	3.66%	SIFMA	AA-/Aa3	-64,688
UT RFS Bonds, Series 2016G	250,000	0	12/01/2016	08/01/2045	2.00%	100% of 1M LIBOR	A/A1	-26,292
Pay-Fixed, Receive-Variable Total	\$1,681,851	\$1,207,675						-\$404,869
PAY-VARIABLE, RECEIVE-VARIABLE (Basis Swap)	Original	Current	Swap		Variable-Rate Paid	Variable-Rate Received	Counterparty Credit Ratings	Current Fair Value
	Notional Amount	Notional Amount	Effective Date	Termination Date				
Bond Issue								
UT PUF Bonds, Series 2008A-3	\$198,113	\$185,080	10/25/2011	07/01/2038	SIFMA	93.40% of 3M LIBOR	AA-/Aa2	5,630
UT RFS Bonds, Series 2008B-4	90,270	90,270	08/01/2009	08/01/2039	SIFMA	102.5% of 3M LIBOR	AA-/Aa3	5,742
UT RFS Bonds, Series 2008B-5	92,045	92,045	08/01/2009	08/01/2030	SIFMA	96% of 3M LIBOR	AA-/Aa3	3,086
UT RFS Bonds, Series 2008B-6	117,190	117,190	08/01/2009	08/01/2035	SIFMA	103% of 3M LIBOR	AA-/Aa3	6,649
UT PUF Bonds, Series 2006B	284,065	284,065	01/01/2009	07/01/2035	SIFMA	82.04% of 1M LIBOR	A/A1	-928
Pay-Variable, Receive-Variable Total	\$781,683	\$768,650						\$20,179
TOTAL UTS INTEREST RATE SWAPS	\$2,463,534	\$1,976,325						-\$384,690
Source: Texas Bond Review Board - Bond Finance Office.								

Table C3

**ESTIMATED DEBT-SERVICE REQUIREMENTS OF VARIABLE-RATE DEBT OUTSTANDING
AND NET INTEREST RATE SWAP PAYMENTS
[EXCLUDES PAY-VARIABLE, RECEIVE-VARIABLE (BASIS) SWAPS]
As of August 31, 2016 (Unaudited)
(amounts in thousands)**

Texas Department of Housing and Community Affairs				
Fiscal Year	<u>Variable-Rate Bonds*</u>		<u>Interest Rate</u>	
Ending 8/31/16	Principal	Interest	Swaps, Net	Total
2017	\$0	\$719	\$3,957	\$4,676
2018	0	875	3,957	\$4,832
2019	0	875	3,957	\$4,832
2020	0	877	3,957	\$4,834
2021	0	873	3,957	\$4,830
2022-2026	20,125	4,089	19,134	\$43,348
2027-2031	26,780	3,370	16,277	\$46,427
2032-2036	72,305	1,764	8,466	\$82,535
2037-2041	15,405	108	690	\$16,203
Total Debt Service				
and Net Interest Rate Swap Payments	\$134,615	\$13,550	\$64,352	\$212,517
*Does not include multifamily bonds outstanding. Source: Texas Department of Housing and Community Affairs				
The University of Texas System				
Fiscal Year	<u>Variable-Rate Bonds</u>		<u>Interest Rate</u>	
Ending 8/31/16	Principal	Interest ⁽¹⁾	Swaps, Net ⁽²⁾	Total
2017	\$26,175	\$6,694	\$38,452	\$71,321
2018	27,140	6,549	37,623	71,313
2019	28,155	6,400	36,764	71,318
2020	27,065	6,244	35,872	69,181
2021	28,055	6,095	35,017	69,167
2022-2026	252,080	26,997	155,091	434,169
2027-2031	302,680	19,368	111,130	433,178
2032-2036	305,815	11,068	63,138	380,021
2037-2041	210,510	1,830	10,260	222,600
Total Debt Service				
and Net Interest Rate Swap Payments	\$1,207,675	\$91,245	\$523,347	\$1,822,267
(1) As required by GASB Statement No. 38, annual debt-service requirements are computed using the System's interest rates in effect on August 31, 2016 on its Series 2008A Bonds, Series 2007B Bonds, and Series 2008B Bonds. (2) Reflects net payments on pay-fixed, receive-variable interest rate swaps based on interest rates in effect at August 31, 2016, applied on the respective notional amounts of the swaps through their respective termination dates. Source: The University of Texas System				
Veterans Land Board				
Fiscal Year	<u>Variable-Rate Bonds</u>		<u>Interest Rate</u>	
Ending 8/31/16	Principal	Interest	Swaps, Net	Total
2017	\$145,070	\$18,957	\$58,407	\$222,435
2018	149,515	17,822	54,358	221,695
2019	154,710	16,600	50,091	221,401
2020	148,250	15,348	45,746	209,344
2021	139,520	14,086	41,352	194,957
2022-2026	604,575	54,203	152,378	811,156
2027-2031	456,230	31,470	78,248	565,949
2032-2036	295,170	15,364	32,160	342,694
2037-2041	181,965	6,197	11,406	199,568
2042-2046	70,270	940	1,840	73,050
2047-2051	280	1	238	519
Total Debt Service				
and Net Interest Rate Swap Payments	\$2,345,555	\$190,989	\$526,225	\$3,062,769
Source: Veterans Land Board				

Table C4				
ESTIMATED DEBT-SERVICE REQUIREMENTS OF VARIABLE-RATE DEBT OUTSTANDING AND NET INTEREST RATE SWAP PAYMENTS [PAY-VARIABLE, RECEIVE-VARIABLE (BASIS) SWAPS ONLY] As of August 31, 2016 (Unaudited) (amounts in thousands)				
The University of Texas System				
Fiscal Year	<u>Variable Rate Bonds</u> ⁽¹⁾		<u>Interest Rate</u>	
Ending 8/31/16	Principal	Interest ⁽²⁾	Swaps, Net ⁽³⁾	Total
2016	\$2,795	\$49	-\$1,351	\$1,492
2017	2,898	48	-1,345	1,601
2018	3,003	48	-1,338	1,713
2019	3,110	48	-1,330	1,828
2020	3,225	48	-1,323	1,950
2021-2025	17,965	233	-6,489	11,709
2026-2030	113,523	208	-5,840	107,891
2031-2035	142,855	143	-3,976	139,022
2036-2040	198,008	42	-1,144	196,906
Total Debt Service and Net Interest Rate Swap Payments	\$487,380	\$867	-\$24,134	\$464,112
(1) Includes principal and interest due on certain related bonds, which are also included in Table C3.				
(2) As required by GASB Statement No. 38, annual debt-service requirements are computed using the System's interest rates in effect on August 31, 2016 on its Series 2008B Bonds, Series 2008A Bonds, and Series 2006B Bonds.				
(3) Reflects net payments on pay-variable, receive-variable interest rate swaps based on interest rates in effect at August 31, 2016, applied on the respective notional amounts of the swaps through their respective termination dates.				
Source: The University of Texas System				
Fiscal Year	<u>Fixed Rate Bonds</u> ⁽¹⁾		<u>Interest Rate</u>	
Ending 8/31/16	Principal	Interest	Swaps, Net ⁽²⁾	Total
2017	\$0	\$14,852	\$379	\$15,231
2018	0	14,852	379	15,231
2019	0	14,852	379	15,231
2020	24,740	14,852	379	39,971
2021	25,980	13,615	346	39,941
2022-2026	82,740	51,471	1,308	135,520
2027-2031	104,045	28,795	732	133,572
2032-2036	46,560	8,587	218	55,365
Total Debt Service and Net Interest Rate Swap Payments	\$284,065	\$161,874	\$4,121	\$450,060
(1) Reflects scheduled principal and interest of Permanent University Fund Bonds, Series 2006B.				
(3) Reflects net payments on pay-variable, receive-variable interest rate swaps based on interest rates in effect at August 31, 2016, applied on the respective notional amounts of the swaps through their respective termination dates.				
Source: The University of Texas System				
Veterans Land Board				
Fiscal Year	<u>Variable-Rate Bonds</u>		<u>Interest Rate</u>	
Ending 8/31/16	Principal	Interest	Swaps, Net	Total
2017	\$1,135	\$200	\$88	\$1,422
2018	1,205	192	84	1,481
2019	1,280	183	80	1,543
2020	1,365	174	76	1,615
2021	1,445	164	72	1,681
2022-2026	8,705	654	287	9,646
2027-2031	11,780	304	133	12,218
2032-2036	2,665	19	8	2,692
Total Debt Service and Net Interest Rate Swap Payments	\$29,580	\$1,890	\$829	\$32,299
Source: Veterans Land Board				

Appendix D

Debt Issuance Costs

Issuance costs are composed of the professional fees and expenses paid to service providers and underwriters to market bonds to investors. Professional services commonly used in the marketing of all types of municipal securities are listed below:¹

- **Underwriter** - The underwriter or underwriting syndicate acts as a dealer that purchases a new issue of municipal securities from the issuer for resale to investors. The underwriter may acquire the securities either by negotiation with the issuer or by award on the basis of competitive bidding.

The largest portion of the costs associated with the issuance of bonds is the fee paid to the underwriter (or underwriting syndicates), known as the “underwriting spread.” The spread is the underwriter’s compensation for purchasing the bonds from the issuer and reselling them in the bond market. It consists of four components:

- Takedown - Represents the discount that the members of the syndicate receive when they purchase the bonds from the issuer;
 - Management fee - Compensation to the underwriters for creating and implementing the financing package;
 - Underwriting fee - A risk premium to compensate the underwriters for market risk of the underwriting; and
 - Expenses - Costs associated with the marketing of the bonds such as CUSIP, travel, printing and underwriter’s legal fees.
- **Bond Counsel** - Bond counsel is retained by the issuer to provide legal advice and a legal opinion that: 1) the issuer is authorized to issue the proposed securities; 2) the issuer has met all legal requirements necessary for issuance; and 3) if appropriate, the interest on the proposed securities is exempt from federal income taxation and where applicable, from state and local taxation. Bond counsel prepares and/or reviews documentation

and advises the issuer regarding: 1) authorizing resolutions or ordinances; 2) trust indentures; 3) official statements; 4) validation proceedings; 5) disclosure requirements; and 6) litigation.

- **Financial Advisor** - The financial advisor advises the issuer on matters pertinent to a proposed issue such as structure, timing, marketing, pricing, terms and bond ratings. A financial advisor may also be employed to provide advice on subjects unrelated to a new issue of securities such as advising on cash flow and investment matters as well as the issuer’s overall debt-management policies.

- **Credit Rating Agencies** - Credit rating agencies provide public or private ratings on the credit quality of securities issues to help investors assess the probability of timely repayment of principal and interest on municipal securities. Ratings are initially released before issuance and are reviewed periodically after issuance and may be amended to reflect changes in the issuer's creditworthiness.

- **Paying Agent/Registrar** - The paying agent is responsible for transmitting payments of principal and interest from the issuer to the security holders and maintaining records of the owners of registered bonds on behalf of the issuer.

- **Printer** - The printer produces the official statement, notice of sale and any bonds required to be transferred between the issuer and purchasers of the bonds.

Choosing the Method of Sale: Negotiated versus Competitive

Selecting the method of sale is one of the most important decisions an issuer of securities must make. Both negotiated and competitive sales have distinct advantages and disadvantages described below.

In a negotiated sale an underwriter is chosen in advance of the sale and agrees to buy the bonds at a mutually-agreed future date for resale. As part of the preparation for the underwriting at that future date, the underwriter actively markets the bonds to

¹ Definitions adapted from the Municipal Securities Rulemaking Board’s *Glossary of Municipal Securities Terms*.

potential buyers to ensure a successful resale at the time of the underwriting. In more complicated financings, pre-sale marketing can be crucial to obtaining the lowest possible interest cost. In addition, the negotiated method of sale offers issuers greater timing and structural flexibility than competitive sales, as well as more influence in directing bond distribution to selected underwriting firms and investors.

Disadvantages of negotiated sales are a lack of competition in pricing and the possible appearance of favoritism. These factors can result in wider fluctuations in underwriting spreads for negotiated transactions than for comparable competitive transactions.

Conditions that suggest a negotiated sale are market volatility and securities for which market demand is difficult to ascertain. Often called “story bonds,” these include securities issued by an infrequent issuer or an issuer with weak or declining credit rating(s) or securities that contain innovative structuring, derivatives or other complexities.

In a competitive sale, sealed or electronic bids from a number of underwriters are opened on a predetermined sale date and time. The bonds are then awarded to the underwriter submitting the lowest bid that meets the terms and conditions of the sale. Generally, underwriters that bid competitively perform less pre-sale marketing because they will not know if they have been awarded the underwriting contract until the day the bids are opened.

Advantages of the competitive bid include: 1) bids are developed in a competitive environment where market forces determine the price; 2) spreads are typically lower; and 3) the winning bid is developed in an open process among underwriters. Disadvantages of the competitive sale include: 1) limited flexibility in timing the sale and structuring the transaction; 2) limited pre-sale marketing; 3) minimum control over the distribution of bonds; and 4) the likelihood that underwriters’ bids will include a risk premium to compensate for uncertainty regarding market demand.

Conditions that suggest a competitive sale are a stable, predictable market in which market demand for the securities can be relatively easily determined. Stable market conditions lessen the underwriters’ risk of holding unsold balances.

Market demand is generally easier to assess for securities that: 1) are issued by well-known, highly-rated issuers that regularly access the debt market; 2) are conventionally structured, such as serial and term coupon bonds; and 3) have a strong source of repayment and thus a high credit rating. These conditions will generally lead to aggressive bidding resulting in lower costs of issuance since the underwriters will be able to more easily assess market demand without extensive pre-marketing activities.

In determining the method of sale, factors such as size, complexity, market conditions and time frame most influence the issuer’s decision. Issuers should focus primarily on how their bonds are being priced in the market and focus secondarily on the underwriting spread. For example, reducing the takedown (selling) component of the underwriters’ spread to reduce costs may result in reducing the sales effort needed to successfully place the issue which in turn could result in a lower price (higher yield) for the issue in aftermarket trading.

Appendix E

Texas State Debt Programs

COLLEGE STUDENT LOAN BONDS

Statutory/Constitutional Authority: Article III, Sections 50b, 50b-1, 50b-2, 50b-3, 50b-4, 50b-5, 50b-6 and 50b-7 of the Texas Constitution, adopted in 1965, 1969, 1989, 1991, 1995, 1999, 2007 and 2011, respectively, authorize the issuance of general obligation bonds by the Texas Higher Education Coordinating Board. Sections 50b, 50b-1, 50b-2, 50b-3, were subsequently repealed in 1999. In 1991, legislation was enacted giving the Coordinating Board authority to issue revenue bonds. The Board is required to obtain the approval of the Attorney General's Office and the Bond Review Board prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose: Proceeds from the sale of bonds are used to make College Access Loans (CAL) to eligible students attending public or private colleges and universities in Texas. The CAL loan is an alternative educational loan that may be used to cover the amount of the student's cost of attendance that is not covered by other resources

Texas Education Code, Section 52.41 authorizes the Board to originate federal student loans through the Federal Family Education Loan Program (FFELP) for existing CAL recipients. However, with passage of the Health Care and Education Reconciliation Act of 2010, origination of loans under the FFELP was terminated on June 30th, 2010. All federally-guaranteed student loans are now originated by the Department of Education's direct lending program. Less than 2% of the loans in the Board's loan portfolio are federal loans that are guaranteed by the Texas Guaranteed Student Loan Corporation, the U.S. Department of Education, or the U.S. Department of Health and Human Services.

Security: The first monies coming into the Comptroller of Public Accounts - Treasury Operations, not otherwise dedicated by the

Constitution, are pledged to pay debt service on the general obligation bonds. Revenue bonds will be repaid solely from program revenues.

Dedicated/Project Revenue: Principal and interest repayments on the loans are pledged to pay debt service on the bonds issued by the Coordinating Board. No draw on general revenue is anticipated.

Contact:

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Texas Higher Education Coordinating Board
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COLLEGE AND UNIVERSITY REVENUE BONDS

Statutory Authority: Section 55.13 of the Texas Education Code authorizes the governing boards of institutions of higher education to issue revenue bonds to provide funds to acquire, construct, improve, enlarge and equip property, buildings, structures or facilities.

The Texas Public Finance Authority (TPFA) acts as the exclusive issuer of revenue debt for Midwestern State University and Texas Southern University. Stephen F. Austin State University, Texas State Technical College System as well as general academic teaching institutions as defined by Section 61.003 of the Texas Education Code have the option to use TPFA as the issuer.

The governing boards are required to obtain the approval of the Bond Review Board unless exempted under Sec. 1231.041 of the Texas Government Code. Approval by the Attorney General's Office prior to issuance is required on all transactions and college and university revenue bond issuers are required to register their bonds with the Comptroller of Public Accounts.

Purpose: Proceeds are used to acquire, purchase, construct, improve, enlarge and/or equip property, buildings, structures, activities, services, operations or other facilities.

Security: The revenue bonds issued by the institutions' governing boards are secured by the income of the institutions and are not an obligation of the state of Texas. Neither the state's full faith and credit nor its taxing power is pledged toward payment of the bonds.

Dedicated/Project Revenue: Debt service is payable from the institution's pledged revenues. Pledged revenues include the pledged tuition and any or all of the revenues, funds and balances lawfully available to the governing boards and derived from or attributable to any member of the Revenue Financing System.

Contact:
Individual colleges and universities.

FARM AND RANCH LOAN BONDS

Statutory/Constitutional Authority: Article III, Section 49-f, of the Texas Constitution, adopted in 1985, authorizes the issuance of general obligation bonds by the Veterans Land Board. The program was transferred in 1993 from the Veterans Land Board to the Texas Agricultural Finance Authority with the passage of HB 1684 by the 73rd Legislature. In 1995, a constitutional amendment was approved that expanded the use of existing bond authority and allows no more than \$200 million of the authority to be used for the purposes defined in Article III, Section 49-i, of the Texas Constitution and for other rural economic development programs. In 1997, HB 2499, 75th Legislature increased the maximum loan amount available through the program to \$250,000. In 2001, SB716, 77th Legislature authorized the Authority to provide a guarantee to a local lender for an eligible applicant.

Purpose: Proceeds from the sale of the general obligation bonds may be used to make loans of up to \$250,000 to each eligible Texan for the purchase of farms and ranches.

Security: The bonds are general obligations of the state of Texas. The first monies coming into the Comptroller of Public Accounts - Treasury Operations, not otherwise dedicated by the Constitution, are pledged to pay debt service on the bonds.

Dedicated/Project Revenue: Principal and interest payments on the farm and ranch loans are pledged to pay debt service on the bonds issued by the Texas Agricultural Finance Authority. The program is designed to be self-supporting; therefore, no draw on general revenue is anticipated.

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HIGHER EDUCATION CONSTITUTIONAL BONDS

Statutory/Constitutional Authority: Article VII, Section 17, of the Texas Constitution, adopted in 1985, authorizes the issuance of constitutional appropriation bonds (generally referred to as Higher Education Assistance Fund or HEF bonds) by institutions of higher education not eligible to issue bonds payable from and secured by the income of the Permanent University Fund (PUF). Legislative approval of bond issues is not required; however, approval of the Bond Review Board and the Attorney General is required and the bonds must be registered with the Comptroller of Public Accounts.

Purpose: Proceeds from the sale of bonds are used by qualified institutions for library

materials, land acquisition, new construction, major repairs and renovations or equipment.

Security: The first \$175 million coming into the Comptroller of Public Accounts - Treasury Operations, not otherwise dedicated by the Constitution, goes to qualified institutions of higher education to fund certain land acquisition, construction and repair projects. In 2005, the 79th Legislature increased the total allocation to qualified institutions to \$262.5 million beginning in fiscal year 2008. Fifty percent of this amount may be pledged to pay debt service on any bonds or notes issued. While not explicitly a general obligation or full-faith and credit bond, the stated pledge has the same effect.

Dedicated/Project Revenue: Debt service is payable solely from state General Revenue Fund appropriations to institutions of higher education.

Contact:

Individual colleges and universities.

PERMANENT UNIVERSITY FUND BONDS

Statutory/Constitutional Authority: Article VII, Section 18, of the Texas Constitution, initially adopted in 1947, as amended in November 1984, authorizes the Boards of Regents of The University of Texas and The Texas A&M University Systems to issue revenue bonds payable from and secured by the income of the Permanent University Fund (PUF). The constitutional amendment approved by voters on November 2, 1999, allows for distributions from the PUF to be based on the "total return" on all PUF investment assets, including current income as well as capital gains. Neither legislative approval nor Bond Review Board approval is required. Approval of the Attorney General is required and the bonds must be registered with the Comptroller of Public Accounts.

Purpose: Proceeds are used for acquiring land either with or without permanent improvements, constructing and equipping buildings or other permanent improvements, major repair and rehabilitation of buildings and other permanent improvements, acquiring capital equipment and library books and library materials and refunding PUF bonds or PUF notes.

Security: Bonds are equally and ratably secured by and payable from a first lien on and pledge of the interest of the UT System or the A&M System in the Available University Fund. The total amount of PUF bonds is subject to the constitutional limitation in that the aggregate amount of bonds payable from the Available University Fund cannot, at the time of issuance, exceed 30% of the cost value of investments and other assets of the PUF, exclusive of real estate.

The PUF bonds do not constitute general obligations of the UT Board or A&M Board, the Systems, the state of Texas or any political subdivision of the state of Texas. Neither the UT Board nor the A&M Board have taxing power, and neither the credit nor the taxing power of the state of Texas or any political subdivision thereof is pledged as security for the bonds.

Dedicated/Project Revenue: Bonds are repaid from the Available University Fund which consists of distributions from the "total return" on all investment assets of the PUF including the net income attributable to the surface of PUF land, in amounts determined by the UT Board.

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TEXAS AGRICULTURAL FINANCE AUTHORITY BONDS

Statutory/Constitutional Authority:

The Texas Public Finance Authority (the “Authority”) is authorized to issue general obligation and revenue bonds on behalf of the Texas Agricultural Finance Authority (“TAFE”) pursuant to Agriculture Code Section 58.041. This authority was transferred from TAFE to the Authority effective September 1, 2009. The issuance of general obligation debt for TAFE programs is authorized by the Texas Constitution, Article III, Sections 49-f and 49-i.

Purpose: Chapter 58 of the Texas Agriculture Code created TAFE under the Texas Agricultural Finance Act and authorizes TAFE to establish programs to support agricultural business in Texas. Under the Agricultural Finance Act, TAFE is authorized to use bond proceeds for loans and other financing assistance for the purchase of farm and ranch land. In addition, proceeds may be used to establish a Texas Agricultural Fund for rural economic development programs and to establish a Rural Microenterprise Development Fund to fund programs that foster and stimulate the creation and expansion of small businesses in rural areas. TAFE may use the proceeds to provide loan guarantees, insurance, coinsurance, loans and indirect loans or purchases or acceptances of assignments of loans or other obligations.

Security: In addition to general obligation bonds, TAFE may issue up to \$500 million in revenue bonds for the purpose of providing money to carry out its programs. Before authorizing the issuance of any general obligation bonds for programs funded by the

Texas Agricultural Development Fund or the Rural Microenterprise Development Fund, the TAFE board must determine that the issuance of revenue bonds is not an economically advisable alternative. TAFE’s revenue bonds are secured by pledged revenues and liens on TAFE’s property, revenues, income or other resources of the authority, including mortgages or other interests in property financed with bond proceeds.

Dedicated/Project Revenue: Debt service on revenue debt issued by TAFE is not an obligation of the state and is payable solely from any loan repayments and other pledged revenue and assets of TAFE. Debt service on general obligation debt is payable from pledged repayments on loans made under a financial assistance program funded by bond proceeds, or state general revenue if income is insufficient to make debt-service payments.

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TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Statutory Authority: The Texas Low-Level Radioactive Waste Disposal Authority (the “Authority”) was created in 1981 (Texas Health and Safety Code, Chapter 402), and authorized to issue revenue bonds in 1987 to finance certain costs related to the creation of a radioactive waste disposal site. The Authority was required to obtain the approval of the Attorney General’s Office and the Bond Review Board prior to issuance and to

register its bonds with the Comptroller of Public Accounts. In 1997, HB 1077, 75th Legislature authorized the Texas Public Finance Authority to issue the bonds on behalf of the Texas Low-Level Radioactive Waste Disposal Authority.

The 76th Legislature abolished the Authority effective September 1, 1999 and transferred all of its duties, responsibilities and resources to the Texas Natural Resource Conservation Commission ("the Commission") that has since been renamed the Texas Commission on Environmental Quality.

Although the statutory authority remains, it is unlikely that any such bonds will be issued.

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TEXAS DEPARTMENT OF HOUSING AND COMMUNITY AFFAIRS BONDS

Statutory Authority: The Texas Department of Housing and Community Affairs (the "Department") was created pursuant to Chapter 762, 1991 Tex. Sess. Law Serv. 2672, the Act, codified as Chapter 2306, Texas Government Code. The Department is the successor agency to the Texas Housing Agency (THA) and the Texas Department of Community Affairs, both of which were abolished by the Act with their functions and obligations transferred to the Department.

Pursuant to the Act, the Department may issue bonds, notes or other obligations to finance or refinance residential housing and to refund bonds previously issued by the THA, the Department or certain other quasi-governmental issuers. The Act specifically provides that the revenue bonds of the THA become revenue bonds of the Department. Legislative approval of bond issues is not

required; however, the Department is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose: Proceeds from the sale of bonds are used to provide assistance to individuals and families of low, very low and moderate income and persons with special needs to obtain decent, safe and sanitary housing.

Security: Any bonds issued are obligations of the Department and are payable solely from the revenues and funds pledged for the payment thereof. The Department's bonds are not an obligation of the state of Texas, and neither the state's full faith and credit nor its taxing power is pledged toward payment of the Department's bonds.

Dedicated/Project Revenue: Revenue received by the Department from the repayment of loans and investment of bond proceeds is pledged to the payment of principal and interest on bonds issued.

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TEXAS DEPARTMENT OF TRANSPORTATION BONDS

Statutory/Constitutional Authority: The Texas Transportation Commission ("Commission"), the governing body of the Texas Department of Transportation

("TxDOT") is authorized to issue both revenue and general obligation bonds.

In 1997, the Texas Turnpike Authority ("TTA") was established as a division of TxDOT by SB 370, 75th Legislature (Texas Transportation Code, Chapter 361). Effective November 6, 2001, SB 342, 77th Legislature abolished TTA's board of directors, and all duties, including authority to issue bonds for toll projects, were transferred to the Commission. The Commission's authority to issue toll revenue bonds is provided by Subchapter C of Chapter 228, Texas Transportation Code.

In 2001, voters approved Article III, Section 49-k of the Texas Constitution, and Subchapter M of Chapter 201, Texas Transportation Code, which established the Texas Mobility Fund within the state treasury and authorized the Commission to issue general obligation bonds payable from the revenues of the fund.

In 2003, voters approved Proposition 14 that added Article III, Section 49-n of the Texas Constitution which, along with the enabling legislation, Section 222.003, Texas Transportation Code, authorized the issuance of \$3 billion in securities payable from the revenues of the State Highway Fund. In 2005 the program capacity was increased to \$6 billion with a maximum annual issuance of \$1.5 billion.

In 2007, voters approved Proposition 12 that added Article III, Section 49-p to the Texas Constitution. In 2009, HB 1, 81st Legislature, First Called Session ratified Section 222.004 to the Texas Transportation Code that authorized the issuance of \$5 billion in highway improvement general obligation bonds.

Purpose: Proceeds from the sale of toll revenue bonds may be used to pay for all or part of the cost of a toll project provided that

they are only used to pay costs of the project for which they are issued. In 2002, the Commission and TTA issued the Central Texas Turnpike System Revenue Obligations to finance a portion of the planning, design, engineering and construction of the initial phase of the Central Texas Turnpike System (SH 130 Segments 1 through 4, SH 45 North, and Loop 1).

Revenues and obligations secured by the Texas Mobility Fund may be used for acquisition, construction, maintenance, reconstruction and expansion of state highways and the participation by the state in the costs of constructing publicly-owned toll roads and other public transportation projects.

State Highway Fund Revenue bonds (Proposition 14 Bonds) may be used to finance state highway improvement projects that are eligible for funding with constitutionally dedicated revenues. Of the \$6 billion currently authorized, \$1.2 billion must be used to fund projects that improve highway safety.

Highway improvement general obligation bonds (Proposition 12 Bonds) may be used to pay all or part of the costs of highway improvement projects.

Security: Project revenue bonds issued pursuant to Chapter 228, Texas Transportation Code (including Central Texas Turnpike System bonds) are not an obligation of the Commission, TxDOT, nor the state and are payable solely from the revenues of the project for which the securities are issued or other eligible sources.

Obligations of the Texas Mobility Fund (the "Fund") are secured by and payable from a pledge of revenues dedicated to and on deposit in the Fund. Pledged revenues of the Fund primarily consist of driver's license fees, driver record information fees, motor vehicle

inspection fees and certificate of title fees. Bonds secured by the Fund may also carry the state's full faith and credit, pledging the state's taxing power toward payment of the bonds if the dedicated revenues in the Fund are insufficient for repayment of the bonds.

State Highway Fund Revenue bonds are payable from a lien on pledged revenues consisting primarily of certain fees and reimbursements deposited to the credit of the State Highway Fund. Major sources of revenue for the State Highway Fund consist of state motor fuels tax receipts, state motor vehicle registration fees and federal reimbursements.

Highway improvement general obligation bonds carry the state's full faith and credit, pledging the state's taxing power toward payment of the bonds.

Dedicated/Project Revenue: Project revenue bonds are repaid from revenue of the project for which the bonds were issued. Debt service on Texas Mobility Fund bonds and State Highway Fund Revenue bonds is payable from the revenues dedicated to each fund except that Texas Mobility Fund bonds also carry the state's general obligation pledge. Highway improvement general obligation bonds issued pursuant to Section 222.004, Texas Transportation Code are payable from the state's general revenues including Proposition 7 deposits to the State Highway Fund. In 2015, voters approved Proposition 7 that added Article VIII, Section 7-c to the Texas Constitution and directs the Comptroller of Public Accounts to deposit in the State Highway Fund \$2.5 billion of the net revenue from the state sales and use tax that exceeds the first \$28 billion of that revenue coming into the state treasury in that fiscal year, beginning in FY 2018.

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**TEXAS PRIVATE ACTIVITY BOND
SURFACE TRANSPORTATION
CORPORATION BONDS**

Statutory Authority: The Texas Transportation Commission ("Commission") is authorized pursuant to the authority in the Texas Transportation Code, Chapter 431, Subchapters A through C ("Chapter 431"), to create transportation corporations to assist and act on behalf of the Commission to promote and develop new and expanded public transportation facilities and systems. Such transportation corporations are authorized to issue bonds for the same purpose for which they were created including issuance of private activity bonds for public transportation facilities and systems to be developed pursuant to comprehensive development agreements entered into by the Texas Department of Transportation ("TxDOT") as authorized by Subchapter E of Chapter 223, Texas Transportation Code. Pursuant to Chapter 431, the Commission created the Texas Private Activity Bond Surface Transportation Corporation ("Corporation") as a conduit issuer of private activity bonds in 2008.

Purpose: Proceeds from the sale of the Corporation's revenue bonds may be used to carry out the purposes for which the Corporation was created, including the development and expansion of public transportation projects, provided that obligations are only used to pay costs of the project for which they are issued.

Security: Bonds issued are payable solely from the revenues, funds, and other sources pledged for the payment thereof. The

Corporation's bonds are not obligations of the state, and neither the state's full faith and credit nor its taxing power is pledged toward the payment of the Corporation's bonds.

Dedicated/Project Revenue: Revenue received by the Corporation from the repayment of loans and investment of bond proceeds is pledged to the payment of principal and interest on the bonds issued.

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**GRAND PARKWAY
TRANSPORTATION CORPORATION
BONDS**

Statutory Authority: The Texas Transportation Commission ("Commission") is authorized pursuant to the authority in the Texas Transportation Code, Chapter 431, Subchapters A through C ("Chapter 431"), to create transportation corporations to assist and act on behalf of the Commission to promote and develop new and expanded public transportation facilities and systems. Such transportation corporations are authorized to issue bonds for the same purpose for which they were created including issuance of bonds for public transportation facilities and systems to be developed pursuant to comprehensive development agreements entered into by the Texas Department of Transportation ("TxDOT") as authorized by Subchapter E of Chapter 223, Texas Transportation Code. Pursuant to Chapter 431, the Commission created the Grand Parkway Transportation Corporation ("Corporation") in 2012.

Purpose: Proceeds from the sale of the Corporation's toll revenue bonds may be used to carry out the purposes for which the

Corporation was created, in particular developing, financing, refinancing, designing, constructing, reconstructing, expanding, operating or maintaining some or all of the segments of State Highway 99 (the "Grand Parkway").

Security: Bonds issued are payable solely from the revenues, funds, and other sources pledged for the payment thereof. The Corporation and TxDOT have entered into a Toll Equity Loan Agreement that makes support available for eligible costs of the Grand Parkway through advances by TxDOT if toll revenues and certain fund balances are insufficient to pay certain expenses. The Corporation's bonds are not obligations of the state, and neither the state's full faith and credit nor its taxing power is pledged toward the payment of the Corporation's bonds.

Dedicated/Project Revenue: Corporation bonds are supported by the tolls and other revenues of the Grand Parkway System (composed of Segment D in Harris County and Segments E, F-1, F-2, and G in Harris and Montgomery Counties) and certain other funds held by the trustee.

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**TEXAS ECONOMIC DEVELOPMENT
AND TOURISM BONDS**

Statutory/Constitutional Authority: As the successor Office to the Texas Department of Economic Development, the Economic Development and Tourism Office (the "Office") within the Office of the Governor was created by SB 275, 78th Legislature and authorizes the Office to issue both general obligation and revenue bonds. In 1989, a constitutional amendment authorizing the

issuance of general obligation bonds was approved. Although legislative approval of bond issues is not required, the Office is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose: Proceeds from the sale of bonds are used to provide financial assistance to promote domestic business development either directly or through local economic development corporations and to provide loans to finance the commercialization of new and improved products and processes.

Security: Revenue bonds are obligations of the Office and are payable from funds of the Office. Revenue bonds are not obligations of the state of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of revenue bonds. The Office is also authorized to issue general obligation debt which is payable from revenues received by the Office. The legislature does not appropriate general revenue for debt service on the general obligation bonds issued by the Office; therefore, any general obligation bonds issued by the Office are required to be self-supporting. All Texas Small Business Industrial Development Corporation Bonds have been defeased as of January 2014.

Dedicated/Project Revenue: Revenue of the Office, primarily from the repayment of loans and the disposition of debt instruments, is pledged to the payment of principal and interest on bonds issued.

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TEXAS MILITARY FACILITIES COMMISSION BONDS

Statutory Authority: The Texas Military Facilities Commission (the "Commission") was created in 1997 by SB 352, 75th Legislature, as the successor agency to the National Guard Armory Board, which was created as a state agency in 1935 (Texas Government Code, Chapter 435) and authorized to issue long-term debt. Legislative approval of bond issues is not required; however, the Commission is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

In 1991, SB 3, 72nd Legislature, authorized the Texas Public Finance Authority (the "Authority") to issue bonds on behalf of the Texas Military Facilities Commission (Texas Government Code, Section 435.041).

SB 1724, Acts of the 80th Legislature (2007) abolished the Commission and transferred all its duties, responsibilities, property and assets to the Adjutant General's Department. To preserve the pledged revenue stream and meet the state's obligations under the bonds, the Commission's title to facilities, the rental and other income of which is pledged to the bonds, was transferred to the Texas Public Finance Authority effective September 1, 2007. The Authority will continue leasing the facilities to the Adjutant General's Department which is obligated to continue making rental payments until the bonds are retired after which the Authority will transfer title to the facilities to the Adjutant General.

Purpose: Proceeds from the sale of bonds are used to acquire land, to construct, remodel, repair or equip buildings for the Texas National Guard.

Security: Any bonds issued are obligations of the Authority and are payable from "rents, issues, and profits" of the facilities leased to

the Adjutant General's Department. The bonds are not general obligations of the state of Texas and neither the state's full faith and credit nor its taxing power is pledged toward payment of the bonds.

Dedicated/Project Revenue: The rent payments used to retire the bonds are paid by the Adjutant General's Department primarily with general revenue funds appropriated by the legislature. Independent project revenue, in the form of other income from properties owned by the Adjutant General's Department is also used to pay a small portion of debt service.

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**TEXAS PARKS AND WILDLIFE
DEPARTMENT BONDS**

Statutory/Constitutional Authority: Article III, Section 49-e, of the Texas Constitution, adopted in 1967, authorized the Texas Parks and Wildlife Department (the "Department") to issue general obligation bonds to acquire and develop state parks. In 1991, SB 3, 72nd Legislature, authorized the Texas Public Finance Authority (the "Authority") to issue bonds on behalf of the Department. In 1997, HB 3189, 75th Legislature, codified in the Texas Parks and Wildlife Code, Section

13.0045, authorized the Authority to issue revenue bonds or other revenue obligations not to exceed \$60.0 million in the aggregate on behalf of the Department for construction and renovation projects for parks and wildlife facilities.

Purpose: Proceeds from the sale of general obligation bonds are used to purchase and develop state park lands. Proceeds from the sale of revenue bonds are used to finance the repair, renovation, improvement and equipping of parks and wildlife facilities.

Security: General obligation debt issued on behalf of the Department is payable from revenues and income of the Department. In the event that such income is insufficient to repay the debt, the first monies coming into the Comptroller of Public Accounts - Treasury Operations, not otherwise dedicated by the Constitution, are pledged to pay debt service on the bonds.

Revenue obligations issued on behalf of the Department are to be repaid from rent payments made by the Department to the Authority. The Department may receive legislative appropriations of general revenue for its required rental payments.

Dedicated/Project Revenue: Debt service on general obligation park development bonds is payable from entrance fees to state parks. Additionally, sporting goods sales tax revenue may also be used to pay debt service on general obligation park development bonds.

The Department's lease obligations to the Authority for revenue bonds are repaid from the Department's general revenue appropriation for lease payments.

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TEXAS PUBLIC FINANCE AUTHORITY BONDS

Statutory/Constitutional Authority: The Texas Public Finance Authority (the “Authority”) is authorized to issue both revenue and general obligation bonds.

The Authority was initially created by the legislature in 1983, by Texas Revised Civil Statutes Ann., Article 601d (now Chapter 1232, Texas Government Code) and was authorized to issue revenue bonds to finance state office buildings.

Article III, Section 49-h, of the Texas Constitution, adopted in 1987, authorized the Authority to issue general obligation bonds for correctional and mental health facilities.

In 1989, the Authority was authorized to establish a Master Lease Purchase Program. This program was created to finance the purchase of equipment on behalf of various state agencies at tax-exempt interest rates.

In 1991, the Authority was given the responsibility of issuing revenue bonds for the Texas Workers’ Compensation Fund under Subchapter G, Chapter 5, of the Texas Insurance Code.

The 73rd Legislature authorized the Authority, effective January 1, 1992, to issue bonds on behalf of the Texas Military Facilities Commission, Texas National Research Laboratory Commission, Texas Parks and Wildlife Department and the Texas State Technical College. In 1993, the Authority was authorized to issue bonds or other obligations

to finance alternative fuels equipment and infrastructure projects for state agencies, institutions of higher education and political subdivisions.

The 74th Legislature authorized the Authority to issue building revenue bonds on behalf of the Texas Department of State Health Services (formerly the Texas Department of Health) for financing a Public Health Laboratory in Travis County and to issue general obligation bonds on behalf of the Texas Juvenile Probation Commission.

The 75th Legislature authorized the Authority to issue bonds on behalf of the Texas Low-Level Radioactive Waste Disposal Authority (see Texas Commission on Environmental Quality), Midwestern State University, Texas Southern University and Stephen F. Austin State University. Other legislation passed by the 75th Legislature authorized the Authority to issue revenue bonds on behalf of the Texas Health and Human Services Commission and the Texas Parks and Wildlife Department. The legislature also authorized the Authority to issue bonds to finance the Texas State History Museum on behalf of the State Preservation Board.

The 76th Legislature authorized the Authority to issue revenue obligations to finance automated information systems for the Texas Department of Human Services’ electronic benefits transfer (EBT) and integrated eligibility (TIERS) programs.

In 2001, constitutional amendments were adopted authorizing the issuance of: (1) up to \$850 million of general obligation bonds to finance construction, renovation and equipment acquisitions for thirteen state agencies (Texas Constitution, Article III, Section 50-f); and (2) up to \$175 million of general obligation bonds to finance assistance to border counties for roadways in colonias (Texas Constitution, Article III, Section 49-l). Additionally, the 77th Legislature authorized

the Authority to issue bonds to finance nursing home liability insurance and to establish a corporation to issue bonds for charter schools. Bonds issued for charter schools do not constitute state debt.

In 2003, the 78th Legislature authorized the Authority to issue revenue bonds on behalf of the Texas Workforce Commission to fund the unemployment compensation program. (See the Texas Labor Code, Chapter 203, Subchapter F.) The 78th Legislature also authorized: (1) the Authority's issuance of general obligation bonds to finance assistance to local governments for economic development projects to enhance the military value of military facilities. Texas voters approved SJR 55 on September 13, 2003 and amended the Texas Constitution, Article III, Section 49-n and Texas Government Code, Chapter 436; and (2) the Authority's issuance of up to \$75 million of revenue bonds to fund the FAIR Plan which provides residential property insurance of last resort.

The 79th Legislature authorized the Authority to issue revenue bonds to finance building improvements for the Texas Department of Transportation and to refinance certain of the Texas Building and Procurement Commission's lease-purchase agreements (now the Texas Facilities Commission).

The 80th Legislature authorized the Authority to issue \$3.00 billion of general obligation debt to finance cancer research (Texas Constitution, Article III, Section 67) and \$1.00 billion to finance capital projects for certain state agencies (Texas Constitution, Article III Section 50-g).

In 2011, the Sunset Advisory Commission conducted a review of the Authority pursuant to the Texas Government Code Chapter 325. HB 2251, 82nd Legislature, Regular Session (2011) became effective June 17, 2011 authorizing the continuation of the Authority for another twelve years. The legislation also authorized Stephen F. Austin State University

to issue debt on its own (under prior law the Authority was the exclusive issuer of debt for that university) and authorized Texas State Technical College System and other general academic teaching institutions to contract with the Authority to issue or refund debt on their behalf.

The Authority is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts. The issuance of not self-supporting debt for Proposition 4 and Proposition 8 constitutional authorizations also requires Legislative Budget Board approval.

Purpose: Proceeds from the sale of general obligation bonds issued under Article III, Section 49-h are used to finance the cost of constructing, acquiring and/or renovating prison facilities, youth correction facilities and mental health/mental retardation facilities. Proceeds of obligations issued under Article III, Section 50-f are used for state agency renovation, construction and equipment acquisition projects. Proceeds of obligations issued under Article III, Section 49-l are used to provide assistance to border counties for colonia roadway projects. Proceeds from the sale of general obligation bonds issued under Article III, Section 67 are used to finance grants for cancer research and the operation of the Cancer Prevention and Research Institute of Texas. Proceeds from the sale of building revenue bonds are used to purchase, construct, renovate and maintain state buildings. Proceeds of bonds issued under Article III, Section 49-n are used to fund the Texas Military Value Revolving Loan Fund to make loans to certain defense communities for improved military value or economic development projects. Proceeds from the sale of bonds for the Workers' Compensation Fund were used to fund the Workers' Compensation Insurance Fund. Proceeds from the issuance of commercial paper under

the Master Lease Purchase Program are used to finance equipment purchases of state agencies. (For a description of the use of funds for bonds issued on behalf of the Texas Military Facilities Commission, the Texas Parks and Wildlife Department and the Texas state colleges and universities that are clients of the Authority, see the applicable sections in this Appendix.) Proceeds of bonds issued on behalf of the Texas National Research Laboratory Commission were used to finance costs of the Superconducting Super Collider; however, the project was canceled in 1995. The revenue bonds issued for the project were defeased in 1995, and the general obligation bonds were economically defeased in November 1999.

Security: Issued building revenue bonds are obligations of the Authority and are payable from “rents, issues, and profits” resulting from leasing projects to the state. These sources of revenue come primarily from legislative appropriations. The general obligation bonds pledge the first monies not otherwise appropriated by the Constitution that come into the state treasury each fiscal year to pay debt service on the bonds. Revenue debt issued for the Unemployment Compensation Insurance Fund was secured by a special obligation assessment imposed on Texas employers by the Texas Workforce Commission. Revenue bonds issued for the Master Lease Purchase Program are secured by lease payments from state agencies which come from state appropriations.

Dedicated/Project Revenue: Debt service on all general obligation bonds, except the park development bonds and military value revolving program bonds is payable solely from the state’s General Revenue Fund. Debt service on the general obligation bonds for park development is paid first from department revenues as described in the applicable section of this appendix. Debt service in the form of loan repayments is paid by participating defense communities to the

Military Preparedness Commission to pay debt on the outstanding bonds. Debt service on the revenue bonds is payable from lease payments which are primarily general revenue funds appropriated to the respective agencies and institutions by the legislature. The legislature, however, has the option to appropriate lease payments to be used for debt service on the bonds from any other source of funds that is lawfully available. For example, debt service on the bonds issued on behalf of the Texas Department of State Health Services is appropriated from lab fees collected by the Department. Bonds issued on behalf of the Workers’ Compensation Fund which are fully economically defeased and were paid in full in December 2006, were payable solely from maintenance tax surcharges authorized in Article 5.76 of the Texas Insurance Code. Issued university revenue bonds are repaid from pledged revenue such as tuition and fees. The university bonds are self-supporting, and the state’s credit is not pledged for their repayment.

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**TEXAS PUBLIC FINANCE
AUTHORITY/TEXAS WINDSTORM
INSURANCE ASSOCIATION BONDS**

Statutory/Constitutional Authority: In the event of catastrophe, the Texas Public Finance Authority (the “Authority”) is authorized to issue revenue obligations for the Texas Windstorm Insurance Association (the “Association”) pursuant to Subchapters B-1 and M, Chapter 2210, of the Texas Insurance Code (the “Act”).

The Authority and the Association are required to obtain the approval of the State Insurance Commissioner, the Bond Review

Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose: Proceeds from the sale of revenue bonds issued may be used to pay incurred claims and operating expenses of the Association; to pay for the purchase of reinsurance for the Association; to provide a reserve fund; and to pay capitalized interest and principal on the public securities for the period determined necessary by the Association.

Security: The bonds are special obligations of the Authority and the Association equally and ratably secured solely by and payable solely from a pledge of and lien on the Pledged Revenues. Pledged Revenues consist of revenues received by the Association from the assessment of the surcharges pursuant to the Authorizing Law, amounts on deposit in the Obligation Revenue Fund and accounts created therein and in the Program Fund and accounts created therein, including all derived investment income.

Dedicated/Project Revenue: Debt service on bonds issued by the Association is payable from any one or a combination of the following: premiums and other revenue of the Association, assessments on Association members, and premium surcharges on property insurance policies in the catastrophe area.

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**TEXAS PUBLIC FINANCE
AUTHORITY CHARTER SCHOOL
FINANCE CORPORATION**

Statutory/Constitutional Authority: The Texas Public Finance Authority Charter

School Finance Corporation (the "Corporation" or "Issuer") is a public, non-profit corporation created by the Texas Public Finance Authority (the "Authority" or "Sponsoring Entity") and exists as an instrumentality of the state pursuant to Texas Education Code, Section 53.351 as amended (the "Act"). The Corporation is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose: Pursuant to the Act, the Issuer is authorized to issue revenue bonds and to lend the proceeds thereof to any authorized charter schools for the purpose of aiding such schools in financing or refinancing "educational facilities" (as such term is defined in the Act) and facilities which are incidental, subordinate or related thereto or appropriate in connection therewith.

Security: The bonds are special and limited obligations of the Issuer, payable solely from revenues to be derived under the loan agreement, the Issuer Master Notes, and in certain circumstances, out of amounts secured through the exercise of remedies provided in the Indenture, the loan agreement, the deed of trust and the Issuer Master Notes. The bonds are not obligations of the state of Texas or any entity other than the Issuer. The Issuer has no taxing power.

Dedicated/Project Revenue: The Issuer issues the bonds and loans the proceeds to the Borrower (an eligible open-enrollment charter school) to finance education facilities of the Borrower. The Borrower's obligations under the Loan Agreement are expected to be paid primarily from the state general revenue allocation the Borrower receives as a charter school, pursuant to Chapter 12 of the Texas Education Code.

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**TEXAS SMALL BUSINESS
INDUSTRIAL DEVELOPMENT
CORPORATION BONDS**

Statutory Authority: The Texas Small Business Industrial Development Corporation (TSBIDC) was created as a private non-profit corporation in 1983 (Title 83, Article 5190.6, Sections 4-37, Tex. Rev. Civ. Stat. Ann. as codified in the Local Government Code, Chapter 503) pursuant to the Development Corporation Act of 1979, and was authorized to issue revenue bonds. The authority of TSBIDC to issue bonds was repealed by the legislature, effective September 1, 1987.

Purpose: Proceeds from the sale of the TSBIDC bonds are used to provide financing to state and local governments and to businesses and non-profit corporations for the purchase of land, facilities and equipment for economic development.

Security: The bonds are obligations of the Corporation. The Corporation's bonds are not an obligation of the state of Texas or any political subdivision of the state, and neither the state's full faith and credit nor its taxing power is pledged toward payment of Corporation bonds.

Dedicated/Project Revenue: Debt service on bonds issued by the TSBIDC is payable from the repayment of loans made from bond proceeds and investment earnings on bond proceeds.

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**TEXAS STATE AFFORDABLE
HOUSING CORPORATION**

Statutory Authority: Chapter 2306, Subchapter Y of the Texas Government Code, authorizes the Texas State Affordable Housing Corporation (the "Corporation") to issue bonds. In accordance with the Texas Government Code, as amended, the Corporation is authorized to issue statewide 501(c)(3) bonds, qualified residential rental project bonds, and qualified mortgage revenue bonds under Section 2306.555. The 77th Legislature established the Professional Educators Home Loan Program under Section 2306.562. The 78th Legislature authorized the Fire Fighter, Law Enforcement or Security Officer, and Emergency Medical Services Personnel Home Loan Program under Section 2306.5621. The 83rd Legislature reauthorized both of the Corporation's profession-specific single family programs by adding all eligible occupations under the Professional Educators Home Loan Program to the Homes for Texas Heroes (formerly known as the Fire Fighter, Law Enforcement or Security Officer, and Emergency Medical Services Personnel) Home Loan Program, creating a single program under Section 2306.5621.

The Corporation is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

Purpose: The Corporation's primary public purpose is to facilitate the provision of housing and the making of affordable loans to individuals and families of low, very low and extremely low income for eligible participants under its programs. The Corporation is required to perform such activities and services that will promote and facilitate the public health, safety and welfare through the provision of adequate, safe and sanitary

housing for individuals and families of low, very low and extremely low income.

Security: Any bonds issued are payable solely from the revenues and funds pledged for the payment thereof. The Corporation's bonds are not obligations of the state of Texas, and neither the state's full faith and credit nor its taxing power is pledged toward the payment of the Corporation's bonds.

Dedicated/Project Revenue: Revenue received by the Corporation from the repayment of loans and investment of bond proceeds is pledged to the payment of principal and interest on the bonds issued.

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TEXAS WATER DEVELOPMENT BONDS

Statutory/Constitutional Authority: The Texas Water Development Board (the "Board") is authorized to issue both revenue and general obligation bonds.

General Obligation: The Board issues self-supporting general obligation bonds for the Development Fund and Rural Water Assistance Programs. The Board may issue not self-supporting general obligation bonds for the State Participation (SP), Water Infrastructure Fund (WIF), Economically Distressed Areas Program (EDAP) and the Agricultural Water Conservation Loan Program.

General Obligation Authority: Article III, Sections 49-c, 49-d, 49-d-1, 49-d-2, 49-d-4, 49-d-6, 49-d-7, 49-d-8, 49-d-9, 49-d-10, 49-d-11 and 50-d of the Texas Constitution, initially adopted in 1957 contain the

authorization for the issuance of general obligation bonds by the Board.

The 71st Legislature (1989) passed comprehensive legislation that established the EDAP. Article III, Section 49-d-7(b), provides for subsidized loans and grants from the proceeds of bonds authorized by this section. The 80th Legislature authorized an additional \$250 million in general obligation bonds for the EDAP detailed in Article III, Section 49-d-10.

General Obligation Approval: Legislative appropriation and voter approval are required for the issuance of general obligation debt. Legislative appropriation is required for not self-supporting debt while no further legislative action is required for self-supporting debt. The issuance of not self-supporting debt also requires Legislative Budget Board review. The Board is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts.

General Obligation Purpose: Proceeds from the sale of the general obligation bonds are used to make loans (and grants under the EDAP) to political subdivisions of Texas for the performance of various projects related to water conservation, transportation, storage and treatment.

General Obligation Security: The general obligation bonds are secured by program revenues and the first monies coming into the Comptroller of Public Accounts - Treasury Operations not otherwise dedicated by the Constitution. The Development Fund Program is designed to be self-supporting. No general revenue draw has been made on this program since 1980. All outstanding series of the SP Program are considered self-supporting. No general revenue draw has been made on this program since 2010.

The EDAP is anticipated to have general

revenue draws. The WIF Program includes certain series that are self-supporting and others that are not self-supporting. The not self-supporting series are anticipated to have general revenue draws.

Revenue Debt Authority: The Texas Water Resources Fund, administered by the Board was created in 1987 by the 70th Legislature (Texas Water Code, Section 17.853), to issue revenue bonds that facilitate the conservation of water resources. The State Water Implementation Revenue Fund for Texas (SWIRFT), administered by the Board was created in 2013 by the 83rd Legislature (Texas Water Code, Chapter 15, Subchapter H), to issue revenue bonds to provide financing or refinancing for projects included in the state water plan. Constitutional related provisions applicable to the SWIRFT are detailed in Article III Section 49-d-13 of the Texas Constitution.

Revenue Debt Approval: Further legislative approval of specific bond issues is not required; however, the Board is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts. For the SWIRFT, the Texas Constitution requires that the Board provide written notice to the Legislative Budget Board before issuing a revenue bond for approval.

Revenue Debt Purpose: Proceeds from the sale of revenue bonds authorized under Texas Water Code, Section 17.853, are used to provide funds to the State Water Pollution Control Revolving Fund (also known as the Clean Water State Revolving Loan Fund) or any other state revolving fund that is created under Subchapter J, Chapter 15 of the Texas Water Code, including Drinking Water State Revolving Fund, and to provide financial assistance to local government jurisdictions through the acquisition of their obligations. SWIRFT bond proceeds will be used to

provide financial assistance to local government jurisdictions through acquisition of their obligations for the purpose of financing state water plan projects.

Revenue Debt Security: Any revenue bonds issued are obligations of the Board and are payable solely from the income of the program including the repayment of loans to political subdivisions. Principal and interest payments on the loans to political subdivisions for projects are pledged to pay debt service on the revenue debt issued by the Board.

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TEXAS WATER RESOURCES FINANCE AUTHORITY BONDS

Statutory Authority: The Texas Water Resources Finance Authority (the "Authority") was created in 1987 (Texas Water Code, Chapter 20) and given the authority to issue revenue bonds. The Authority is required to obtain the approval of the Bond Review Board and the Attorney General's Office prior to issuance and to register its bonds with the Comptroller of Public Accounts. No such bonds are currently outstanding.

Purpose: Proceeds from the sale of bonds are used to finance the acquisition of the bonds of local government jurisdictions including local jurisdiction bonds that are owned by the Texas Water Development Board.

Security: Issued bonds are obligations of the Authority and are payable from funds of the Authority. The Authority's bonds are not an obligation of the state of Texas, and neither the state's full faith and credit nor its taxing

power is pledged toward payment of Authority bonds.

Dedicated/Project Revenue: Revenue from the payment of principal and interest on local jurisdiction bonds acquired is pledged to the payment of principal and interest on bonds issued.

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VETERANS' LAND AND HOUSING ASSISTANCE BONDS

Statutory/Constitutional Authority: Article III, Section 49-b, of the Texas Constitution, initially adopted in 1946, authorized the issuance of general obligation bonds to finance the Veterans Land Program. Article III, Section 49-b-1, of the Texas Constitution, adopted in 1983, authorized additional land bonds and created the Veterans' Housing Assistance Program and established the Veterans' Housing Assistance Fund within the program. Article III, Section 49-b-2, of the Texas Constitution, adopted in 1993, authorized additional land bonds and the issuance of general obligation bonds to finance the Veterans' Housing Assistance Program, Fund II. Article III, Section 49-b, amended in 2001 and 2003, also authorizes the Veterans Land Board to use assets from the Veterans' Land Fund, the Veterans' Housing Assistance Fund or the Veterans' Housing Assistance Fund II in connection with veterans' cemeteries and veterans' long-term care facilities. Chapter 164 of the Texas Natural Resources Code authorized the Veterans Land Board to issue revenue bonds for its programs including the financing of veterans' long-term care facilities.

Purpose: Proceeds from the sale of the general obligation bonds are loaned to eligible Texas veterans for the purchase of land,

housing and home improvements. Proceeds from the sale of revenue bonds are used to make land loans to veterans, to make home mortgage loans to veterans or to provide for veterans' skilled nursing-care homes. Additionally, funds are used to provide cemeteries for veterans.

Security: In addition to program revenues, the general obligation bonds pledge the first monies coming into the Comptroller of Public Accounts - Treasury Operations not otherwise dedicated by the Constitution. The revenue bonds issued under Chapter 164 are special obligations of the Board and are payable only from and secured by the revenue and assets pledged to secure payment of the bonds under the Texas Constitution and Chapter 164. The revenue bonds do not create or constitute a pledge, gift, or loan of the full faith, credit or taxing authority of the state.

Dedicated/Project Revenue: Debt service on the general obligation bonds is payable from principal and interest payments on the underlying loans to veterans. Debt service for the revenue bonds is paid from all available revenue from the projects financed which is pledged as security for the bonds. The programs are designed to be self-supporting and have never had to rely on the General Revenue Fund.

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Appendix F

The Private Activity Bond Program

Since the passage of the Tax Reform Act of 1986 (the "Tax Act"), federal law has limited the use of tax-exempt financing for private activities. Tax-exempt private activity bonds may be used to finance certain privately-owned projects that serve a public purpose and meet the following tests: 1) Private Business Use Test - more than 10 percent of the proceeds are to be used for any private business use; 2) Private Security or Payment Test - payment on principal or interest of more than 10 percent of the proceeds is to be directly or indirectly secured by, or payments are to be derived from a private business use; and 3) Private Loan Financing Test - proceeds are to be used to make or finance loans to persons other than governmental units.

The Tax Act authorizes the issuance of six types (subceilings) of private activity bond issues: 1) Single-Family housing projects (permitted to issue qualified mortgage revenue bonds (MRB) or mortgage credit certificates (MCC); 2) Certain state-voted bond issues; 3) Qualified small-issue industrial development bonds (IDBs) or enterprise zone bonds (EZBs); 4) Multifamily residential rental projects; 5) Student loan bonds; and 6) All other issues that include a variety of exempt facilities such as sewage facilities, solid and hazardous waste disposal facilities. In recent years a widening variety of projects have been permitted to utilize tax-exempt private activity bonds including transportation facilities, environmental enhancements to hydroelectric generating facilities and qualified public educational facilities.

In addition, the Tax Act imposes a volume ceiling (or cap) on the aggregate principal amount of tax-exempt private activity bonds that may be issued within each state during any calendar year. The current volume cap is the greater of \$100 per capita or \$301.5 million. Based on the per capita amount, the state's volume cap for calendar year 2016 was \$2.75 billion.

Section 146(e) of the Internal Revenue Code provides for each state to devise an allocation formula or a process for allocating the state's volume cap. This provision gives each state the ability to allocate this limited resource in a manner consistent with its own specific needs.

Chapter 1372 of the Texas Government Code mandates the allocation process for the state of Texas. The Private Activity Bond Allocation Program (PAB or Program) regulates the volume cap and monitors the amount of demand and use of private activity bonds each year. The BRB has administered this program since January 1, 1992.

The federal government determines the state's private activity ceiling, but historically the demand for financing for qualified private activities outstrips the supply of available volume cap. In an effort to address the excess demand over supply for most types of PAB financing, the Legislature devised a lottery system that ensures an allocation opportunity for each eligible project type.

With the exception of single-family housing and student loan bonds, reservations of state ceilings are allocated by lottery for applications received from October 5 through October 20 of the preceding program year, and thereafter on a first-come, first-served basis. Single-family housing and student loan bonds have a separate priority system based on prior applications and prior bond issues. This system is in place from January through August 14th of each year. On August 15th (the collapse date) all unreserved allocation from all the subceilings are combined and redistributed by lottery number or on a first-come, first-served basis if all applicants from the lottery have received a reservation.

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Appendix G

Glossary

Advance Refunding – A refunding in which the refunded issue remains outstanding for a period of more than 90 days after the issuance of the refunding issue.

Allocation – The amount of private activity bond authority obtained from the state ceiling and assigned to a bond issuer that is using the issuance proceeds for a private activity that qualifies for exemption from federal income tax under the IRS Code.

Allotment – Amount of securities distributed to each member of the underwriting syndicate to fill orders.

Authorized but unissued – Debt that has been authorized for a specific purpose by the voters and/or the legislature but has not yet been issued. Authorized but unissued debt can be issued without the need for further legislative action.

Bond – Debt instrument in which an investor loans money to the issuer that specifies: when the loan is due (“term” or “maturity” such as 20 years), the interest rate the borrower will pay (such as 5%), when the debt-service payments will be made (such as monthly, semi-annually, annually) and the revenue source pledged to make the payments.

Bond Counsel – Attorney retained by the issuer to give a legal opinion that the issuer is authorized to issue the proposed securities, the legal requirements necessary for issuance have been met and the proposed securities will be exempt from federal income taxation and state and local taxation where applicable.

Bond Insurance – A legal commitment by an insurance company to make timely payments of principal and interest in the event that the issuer of the debt is unable to make the payments.

Capital Appreciation Bonds (CAB) – A municipal security on which the investment return on an initial principal amount is reinvested at a stated compounded rate until maturity. At maturity the investor receives a single payment (the “maturity value”) representing both the initial principal amount and the total investment return.

CAB Maturity Amount - The single payment for a capital appreciation bond an investor receives at maturity representing both the initial principal amount and interest. For capital appreciation bonds compound accreted values are calculated as interest in the year of maturity.

CAB Par Amount - The face amount assigned to a capital appreciation bond at issuance and paid to the investor at maturity.

CAB Premium - The amount by which the price paid for a (CAB) security exceeds par value.

Carryforward – A private activity bond term for the three types of state ceiling that can be carried over for use by an issuer in the subsequent three years. The three types are:

- 1) **Traditional Carryforward** - The amount of the state ceiling not reserved before November 15 and any amount previously reserved that becomes available on or after that date because of a reservation cancellation.
- 2) **Non-Traditional Carryforward** - The amount of state ceiling reserved by an issuer for a specific purpose and for which the closing date extends beyond the year in which the reservation was granted.
- 3) **Unencumbered Carryforward** - The amount of state ceiling at the end of the year that is not reserved, nor designated as carryforward, and for which no application for carryforward is pending.

Certificate of Obligation – A bond issued by a city, county or certain hospital districts without the approval of voters to finance public projects. Although voter approval is not required, the sale can be stopped if 5 percent of the total voters in the taxing area sign a petition and submit it prior to approval of the ordinance to sell such certificates.

Certificate of Participation – Financing in which an individual buys a share of the lease revenues of an agreement made by a municipal or governmental entity, rather than the bond being secured by those revenues.

Commercial Paper – Short-term, unsecured promissory notes that mature within 270 days and are backed by a liquidity provider (usually a bank) that stands by to provide liquidity in the event the notes are not remarketed or redeemed at maturity.

Competitive Sale – A sale in which the issuer solicits bids from underwriting firms and sells the securities to the underwriter or syndicate offering the most favorable bid that meets the specifications of the notice of sale.

Component Unit (CU) – A legally separate entity for which the elected officials of the primary government (PG) are financially accountable. The nature and significance of the CUs relationship with the PG is such that exclusion from the PG's financial reports would be misleading or create incomplete financial statements.

Conduit Issuer – An issuer, usually a government agency, that issues municipal securities to finance revenue-generating projects in which the funds generated are used by a third party (known as the "conduit borrower" or "obligor") for debt-service payments.

Costs of Issuance – The expenses associated with the sale of a new issue of municipal securities including underwriting costs, legal fees, rating agency fees and other fees associated with the transaction.

Coupon – The interest rate paid on a security.

Counterparty Risk – The risk to each party in a swap contract that the counterparty will not fulfill its contractual obligations.

Current Interest Bond (CIB) – A bond in which interest payments are made on a periodic basis throughout the life of the bond as opposed to a bond such as a capital appreciation bond that pays interest only at maturity. This term is most often used in the context of a

combination issuance of bonds that includes both capital appreciation bonds and current interest bonds.

Current Refunding – A refunding transaction in which the municipal securities being refunded will mature or be redeemed within 90 days or less from the date of issuance of the refunding issue.

CUSIP – A unique nine-character identification for each class of security approved for trading in the U.S. CUSIPs are used to facilitate clearing and settlement for market trades.

Defeasance - A provision that voids a debt when the borrower sets aside cash, securities or investments sufficient enough to service the borrower's debt.

Dealer Fee – Cost of underwriting, trading or selling securities.

Derivative - A financial instrument whose value is based on one or more underlying assets. An example is a swap contract between two counterparties that specifies conditions (especially the dates, underlying variables and notional amounts) under which payments are to be made between the parties.

Disclosure – The act of releasing accurately and completely all material information to investors and the securities markets for outstanding or to be issued securities.

Discount – The amount by which the price paid for a security is less than its par value.

Escrow – Fund established to hold monies or securities pledged to pay debt service.

Escrow Agent – Commercial bank or trust company retained to hold the investments purchased with the proceeds of an advance refunding and to use the invested funds to pay debt service on the refunded debt.

Financial Advisor – A securities firm that assists an issuer on matters pertaining to a proposed issue such as structuring, timing, marketing, fairness of pricing, terms and debt ratings.

General Obligation Debt – Debt legally secured by a constitutional pledge of the first monies coming into the State Treasury not otherwise constitutionally dedicated for another purpose. General obligation debt must be approved by a 2/3 vote of both houses of the Texas Legislature and by a majority of the voters.

General Revenue (GR) – The amount of total state tax collections and federal monies distributed to the state for its operations.

Higher Education Fund (HEF) – Appropriations that became available beginning in 1985 through Constitutional Amendment to fund permanent capital improvements for certain public higher education institutions. This term may refer either to Higher Education Assistance Fund (HEAF) Treasury Funds (funds reimbursed from the State HEAF

appropriation for university expenditures) or HEAF Bond Funds (monies received through the issuance of bonds and secured by HEAF Treasury Funds).

Indenture – Deed or contract which may be in the form of a resolution that sets forth the legal obligations between the issuer and the securities holders. The indenture also names the trustee that represents the interests of the securities holders.

Issuer – A legal entity that sells securities for the purpose of financing its operations. Issuers are legally responsible for the obligations of the issue and for reporting financial conditions, material developments and any other operational activities.

Lease Purchase – Financing the purchase of an asset over time through lease payments that include principal and interest. Lease purchases can be financed through a private vendor or through one of the state's pool programs such as the Texas Public Finance Authority's Master Lease Purchase Program.

Letter of Credit – A credit enhancement used by an issuer to secure a higher rating for its securities. A Letter of Credit is usually a contractual agreement between a major financial institution and the issuer consisting of an unconditional pledge of the institution's credit to make debt-service payments in the event of a default.

Liquidity – The relative ability of a security to be readily traded or converted into cash without substantial transaction costs or loss in value.

Liquidity Provider – A financial institution that facilitates the trading of a security by insuring that it will be purchased if tendered to the issuer or its agent because it cannot be immediately remarketed to new investors.

Management Fee – Component of the underwriting spread that compensates the underwriters for assistance in creating and implementing the financing.

Maturity Date – The date principal is due and payable to the security holder.

Mortgage Credit Certificate – A certificate issued by certain state or local governments that allows a taxpayer to claim a tax credit for some portion of the mortgage interest paid during a given tax year.

Municipal Bond – A debt security issued to finance projects for a state, municipality or county. Municipal securities are exempt from federal taxes and from most state and local taxes.

Negotiated Sale – A sale in which an issuer selects an underwriting firm or syndicate to assist with the issuance process. At the time of sale, the issuer negotiates a purchase price for its securities with that underwriting firm or syndicate.

Not Self-Supporting Debt – Either general obligation or revenue debt intended to be repaid with state general revenues.

Notice of Sale – Publication by an issuer describing the terms of sale of an anticipated new offering of municipal securities.

Official Statement – The document published by the issuer which provides complete and accurate material information to investors on a new issue of municipal securities including the purposes of the issue, repayment provisions and the financial, economic and social characteristics of the issuing government.

Par – The face value of a security that is due at maturity. A “par bond” is a bond selling at its face value.

Paying Agent – The entity responsible for processing debt-service payments from the issuer to the security holders.

Permanent University Fund (PUF) – The PUF is a state endowment contributing to the support of 21 institutions and certain agencies of The University of Texas System and The Texas A&M University System. The PUF was established by the Texas Constitution in 1876 with land grants ultimately totaling 2.1 million acres primarily in west Texas (PUF Lands).

Premium – The amount by which the price paid for a security exceeds par value.

Printer – A business that produces the official statement, notice of sale and any bonds required to be transferred between the issuer and purchasers of the bonds. The costs associated with a printer are typically rolled into the Costs of Issuance.

Private Activity Bond (PAB) – A tax-exempt bond issued by or on behalf of local or state government for the purpose of financing the project of a private user, and generally, the government does not pledge its credit.

Private Placement – A securities sale in which an issuer sells its securities directly to investors through a placement agent without a public offering.

Put Bond – A bond that allows the holder to force the issuer to repurchase the security at specified dates before maturity. The repurchase price is set at the time of issue and is usually par value.

Rating Agency – An entity that provides publicly available ratings of the credit quality of securities issuers, measuring the probability of the timely repayment of principal and interest on municipal securities.

Refunding Bond – Bonds issued to retire or defease all or a portion of outstanding bonds.

Registrar – An entity responsible for maintaining ownership records on behalf of the issuer.

Remarketing Fee – Compensation to an agent for remarketing a secondary offering of short-term securities, usually for a mandatory or optional redemption or put (return of the security to the issuer).

Reservation – The notice given by the BRB to a private activity bond issuer reserving a specific amount of the state ceiling for a specific issue of bonds for 120 to 180 days, depending on the type of bond issuance.

Revenue Debt – Debt that is legally secured by a specified revenue source(s). Revenue debt does not require voter approval and usually has a maturity based on the life of the project to be financed.

Self-Supporting Debt – Debt that is designed to be repaid with revenues other than state general revenues. Self-supporting debt can be either general obligation debt or revenue debt.

Selling Group – Group of municipal securities brokers and dealers that assist in the distribution of a new issue of securities.

Serial Bond – A bond issue in which a portion of the outstanding bonds matures at regular intervals until all of the bonds have matured.

Spread Expenses – Component of the underwriting spread representing the costs of operating the syndicate such as financial advisors, legal counsel, travel, printing, day loans, wire fees and other associated fees.

State ceiling – The amount of private activity bond authority granted to a state under the IRS Code to issue tax-exempt private activity bonds during a calendar year.

Structuring Fee – Component of the underwriting spread that compensates the underwriters for assistance with developing a marketable securities offering within the issuer's legal and financial constraints.

Swap – A derivative in which counterparties exchange cash flows of one party's financial instrument for those of the other party's financial instrument.

Syndicate – Group of underwriters formed to purchase a new issue of securities from the issuer and offer it for resale to investors.

Takedown – The discount that the members of the syndicate receive when they purchase the securities from the issuer. Takedown is also known as the selling concession.

Tax and Revenue Anticipation Notes (TRAN) – Short-term loans that the state uses to address cash flow needs created when expenditures must be incurred before tax revenues are received.

Term Bond – A bond issue in which all or a large part of the issue comes due in a single maturity. Term bond issuers make periodic payments into a sinking fund for mandatory redemption of term bonds before maturity or for payment at maturity.

Trustee – Bank or trust company designated by the issuer or borrower under the indenture or resolution as the custodian of funds. The trustee represents the interests of the security holders including making debt-service payments.

Tuition Revenue Bonds (TRB) – Revenue bonds issued by the revenue finance systems of institutions of higher education or the Texas Public Finance Authority (on behalf of certain institutions), for new building construction or renovation. The Legislature has to authorize the projects in statute, and the TRBs cannot be used for auxiliary space, such as dormitories. All college and university revenue bonds are equally secured by, and payable from a pledge of all or a portion of certain “revenue funds” as defined in the Texas Education Code, Chapter 55. Though legally secured through an institution’s tuition and fee revenue, historically the state has used general revenue to reimburse the universities for debt service for these bonds.

Unrestricted General Revenue (UGR) – The net amount of general revenue remaining after deducting all constitutional allocations and other restricted revenue from total general revenue.

Underwriter – An investment banking firm that purchases securities directly from the issuer and resells them to investors.

Underwriting Spread – Amount representing the difference between the price at which securities are bought from the issuer by the underwriter and the price at which they are re-offered to the investor. The underwriting spread generally includes the takedown, management fee, expenses and underwriting fee.

Underwriting Risk Fee – A portion of the underwriting spread designed to compensate the underwriter for the risk associated with market shifts and interest rate fluctuations.

Underwriter’s Counsel – Attorney who prepares or reviews the issuer’s offering documents on behalf of the underwriter and prepares documentation for the underwriting agreement and the agreement among underwriters.

Underwriter’s Risk – The underwriter’s risk of resale.

Variable Rate – An interest rate that fluctuates based on market conditions or a predetermined index or formula. (Fixed rates do not change during the life of the obligation.)

Years to Maturity - The period of time for which a financial instrument remains outstanding. Maturity refers to a finite time period at the end of which the financial instrument will cease to exist, and the principal is repaid with interest.

Yield – The investor’s rate of return.

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